DOCUMENT RESUME

ED 152 028 EC 104 100

AUTHOR	Harkins, Judy Athey
TITLE	Statewide Feasibility Study of Postsecondary Education for Deaf People in Maryland, 1976-1978. Final Report.
INSTITUTION	Howard Community Coll., Columbia, Md.
SPONS AGENCY	Maryland State Dept. of Education, Baltimore. Div. of Vocational-Technical Education.
PUB DATE	78
NOTE	339p.; For the 1976-77 report, see EC 101 382 ; Parts of the appendix may not reproduce clearly
EDRS PRICE	MF-$0.83 HC-$18.07 Plus Postage.
DESCRIPTORS	Aurally Handicapped; *Deaf; *Educational Needs; Exceptional Child Research; *Needs Assessment; Post Secondary Education; *State Programs; Vocational Education
IDENTIFIERS	*Maryland

ABSTRACT

Presented is the 1976-78 final report of a feasibility study on the postsecondary educational needs of deaf individuals in the state of Maryland. Objectives, methodology, and evaluation procedures are briefly reviewed. Listed among conclusions are that deaf people do need postsecondary education, particularly vocational-technical education; that one of the greatest administrative dilemmas faced in serving deaf people is the high excess cost of services coupled with low incidence of deafness in the population; and that deaf people would benefit most if a program of support services were located in a large community college. The appendixes, which make up the bulk of the document, include reports on the following topics: needs assessment of postsecondary education for deaf people in Maryland, implications of manpower research in postsecondary education for deaf people in Maryland, complementary community resources for a community college program for deaf students, a conference on deafness for community college personnel, existing postsecondary programs for deaf students and implications for a program in Maryland, an analysis of postsecondary education resources in Maryland in relationship to needs of deaf people, and funding sources and a suggested proposal for a program for deaf students. Also included are a list of materials, a list of articles published in conjunction with the feasability study, and a statement of the project advisory committee on the location of a program of support services for deaf students. (SBH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED152028

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Final Report of the Statewide Feasibility Study of Postsecondary Education for Deaf People in Maryland

March 15, 1978

Howard Community College

Judy (Athey) Harkins, Project Coordinator

This Project is made possible by the Division of Vocational-Technical Education of the Maryland State Department of Education, with funds from the Vocational Education Amendments of 1968, P.L. 90-576.

EC104108

DAVID W. HORNBECK
STATE SUPERINTENDENT

MARYLAND STATE DEPARTMENT OF EDUCATION
P.O. BOX 8717, BWI AIRPORT
BALTIMORE, MARYLAND 21240

LETTER OF ENDORSEMENT

The Maryland State Department of Education, Division of Vocational-Technical Education, recognizes the vast undertakings and efforts made by Howard Community College through the feasibility study conducted for deaf persons at the post-secondary level in Maryland.

We recognize the increasing need for identifying and implementing programs and services for persons with handicapping conditions in order that employment opportunities can be made available.

Services to deaf persons can indeed open new horizons for individuals themselves, but more importantly for the community.

The Division of Vocational-Technical Education is aware that the problems confronting the handicapped in Maryland cannot be solved by one agency or entity. Thus, we commend the comprehensive approach taken and the quality of effort demonstrated through this study.

It is hoped that this document will serve as a catalyst by providing the necessary services that will enable this population to become employable and contributing members of society.

Daniel B. Dunham

Daniel B. Dunham
Assistant State Superintendent
Vocational-Technical Education

howard community college

Dr. Alfred J. Smith, Jr.
President

Columbia, Maryland 21044
301—992-4820

February 27, 1978

Ms. Judith A. Harkins
Project Coordinator
Feasibility Study of Postsecondary Education
for Deaf Students
Howard Community College
Little Patuxent Parkway
Columbia, MD 21044

Dear Judy

Approximately four years ago, the administration of Howard Community College became concerned about the postsecondary educational opportunities for deaf people in the service area of Howard Community College, as well as in Maryland. This particular interest was sparked by the creative thought of Dr. Sheldon Greenberg and furthered by the personal interest of an administrator responsible for the furtherance of such ideas. It is with great personal pleasure that the College now sees a completion of the eighteen-month Statewide feasibility study, which has involved the efforts of numerous individuals and, especially, you as the project director.

Community colleges throughout the nation become the vehicles through which various kinds of individuals -- the elderly, women, minorities, the retired, those in need of retraining, professional upgrading -- have obtained new careers and education necessary to achieve their personal aspirations. Now, the community colleges are serving an entirely new constituency -- the handicapped. It is noteworthy, however, that such institutions initiated their services to the handicapped long before the current requirements of the Rehabilitation Act of 1973, Section 504, were imposed by the Federal government.

The conclusions and recommendations of this report emphasize the continued service that the community colleges can continue to play with respect to deaf people.

The project has elicited considerable significant material and valuable ideas which must be seriously considered in order to serve the deaf people in community colleges. However, those responsible for providing the funds in order to accomplish a model program must provide serious consideration, not only to the criteria included in this report, but also to additional essential ingredients which may be the most significant elements in postsecondary deaf education:

1. The interest and support of administration. Experience has long demonstrated that a program which has the sympathetic understanding and support of the top administrators of an institution will enhance the viability of the program. Numerous decisions are involved in the creation and on-going conduct of any program of learning. A sympathetic administrator charged with making decisions will make an important difference.

2. Demonstrated academic leadership and flexibility. Community colleges which have demonstrated leadership in the creation of effective vocational-technical learning programs, as well as promoting the flexibility of educators in such curriculum are important environmental factors for programs for the deaf. Indeed, the success of a program in postsecondary education for deaf people will be closely correlated to such items.

As a final comment, the leadership of the Division of Vocational-Technical Education of the Maryland State Department of Education and others, who have been associated with and who have contributed to the Feasibility Study, must be complimented for their vision and support.

Alfred J Smith Jr.

Alfred J. Smith, Jr.
President

AJS/amk

Maryland State Board for Community Colleges
THE JEFFREY BUILDING
16 Francis Street
Annapolis, Maryland 21401
301-269-2881

March 10, 1978

Ms. Judy Harkins
Project Coordinator
Deaf Education Feasibility Study
Howard Community College
Little Patuxent Parkway
Columbia, Maryland 21043

Dear Ms. Harkins:

On behalf of the State Board for Community Colleges I would like to indicate our strong support for the initiation and completion of a study related to the needs of deaf people in Maryland. Howard Community College and its staff should be congratulated for the pioneering efforts made in this area. The State Board supports the continued efforts of Howard Community College as it seeks to find additional resources to serve deaf people.

Sincerely,

Brent M. Johnson
Executive Director

BMJ/jeb

STATE OF MARYLAND
OFFICE FOR THE COORDINATION OF SERVICES
TO THE HANDICAPPED

OLD ARMORY BUILDING
11 BLADEN STREET
ANNAPOLIS, MARYLAND 21401

BLAIR LEE, III
ACTING GOVERNOR

RICHARD G. DUNNE
DIRECTOR

AREA CODE 301
269-2908
269-2909

February 9, 1978

Ms. Judy Harkins, Project Coordinator
Feasibility Study of Postsecondary
Education for Deaf Students
Howard Community College
Columbia, MD 21044

Dear Judy:

I have reviewed the report "Feasibility Study of Postsecondary Education for Deaf Students" and would commend both the report and the many hours of time and effort put into the groundwork for this report.

With the numerous mandates regarding services to the deaf currently in effect, the background material and conclusions and recommendations contained in this report will provide a valuable resource for meeting these mandates and, most importantly, the needs of the deaf community in Maryland. As this report so clearly highlights, services to handicapped individuals will best be served by a Statewide effort at coordination. The interagency cooperation evidenced in your work is a major step towards realizing this goal.

Again, my congratulations and sincere appreciation for the time and work involved in the "Feasibility Study." It is a viable contribution towards the efforts of greater coordination of services to the handicapped.

With regards,

Richard G. Dunne

Richard G. Dunne
Director

RGD:sg

Table of Contents

Acknowledgements 1

Advisory Committee 2

Description of Feasibility Study 4

Conclusions of the Study 10

Appendices

Report 1: Needs Assessment of Postsecondary Education for Deaf People in Maryland — Appendix A

Report 2: Implications of Manpower Research in Postsecondary Education for Deaf People in Maryland — Appendix B

Report 3: Complementary Community Resources for a Community College Program for Deaf Students — Appendix C

Report 4: A Conference on Deafness for Community College Personnel — Appendix D

Report 5: How They Do It: Existing Postsecondary Programs for Deaf Students and Implications for a Program in Maryland — Appendix E

Report 6: An Analysis of Postsecondary Education Resources in Maryland in Relationship to Needs of Deaf People — Appendix F

Report 7: Funding Sources and a Suggested Proposal for a Program for Deaf Students — Appendix G

List of Materials on Section 504 and Deafness, Distributed to Maryland's Community Colleges — Appendix H

Articles Published in Conjunction with the Feasibility Study — Appendix I

Statement of the Project Advisory Committee on the Location of a Program of Support Services for Deaf Students — Appendix J

Acknowledgements

There is a hazard of oversight in writing an acknowledgement section for any report, but in this case, the hazard is extreme. Because of the nature of the study and the diverse sources of information used, it is impossible to mention every person in every agency who assisted in the project. Yet because so many people gave their time, it is essential to mention some.

Both Howard Community College, which conceived and administered the feasibility study, and the Division of Vocational-Technical Education, Maryland State Department of Education, the primary funding source, have provided an invaluable service.

Credit for the conception of the project goes to Dr. Sheldon F. Greenberg, with assistance in developing the idea from Ruth Brown, Joseph P. DeSantis, and James S. Smith. James S. Smith also gave countless hours to the supervision of the project. His knowledge of postsecondary occupational education in the State was a tremendous asset.

In addition to the contributions of these people, advisory committee members (listed in the next section) devoted many hours to guiding the project. Special thanks to Dr. David Denton, Dr. Roland G. (Ron) Frank, and Dr. McCay Vernon for always being ready to help.

Many Maryland agencies cooperated with the project staff during the study. These include the Division of Vocational Technical Education, the Division of Vocational Rehabilitation, the State Board for Community Colleges, the Maryland Schools for the Deaf, and the Governor's Office for Coordination of Services to the Handicapped. In addition to state agencies, Gallaudet College (Washington, D.C.) and the National Technical Institute for the Deaf (Rochester, N.Y.) were very helpful.

The Advisory Committee

The feasibility study's advisory committee includes leaders in education of deaf people, vocational education, vocational rehabilitation, community colleges, and the deaf community. Members of this group assisted in countless ways as individuals, contributing to the project according to their areas of expertise. In addition, the committee met six times as a group to review completed and proposed project activities. Their help and encouragement to the project coordinator were essential for a successful project.

Project Advisory Committee

Ruth Brown
Staff Specialist - Special Programs
Division of Vocational Technical Education
Maryland State Department of Education

Frank Bryan
Principal
Maryland School for the Deaf - Columbia Campus

Norma Buemi
Counselor
Gallaudet College
(Former Vocational Rehabilitation Counselor)

Lillian Clark
Parent of Deaf Child and member of Howard County Chapter of Governor's Committee on Employment of the Handicapped

Edward E. Corbett, Jr.
Administrative Coordinator
Maryland School for the Deaf

David M. Denton
Superintendent
Maryland School for the Deaf

Joseph P. DeSantis
Staff Specialist in Vocational-Technical Education
Maryland State Department of Education

Roland G. Frank
Director of Community Education
Gallaudet College

Gertrude S. Galloway
President
Maryland Association of the Deaf

Bernice Hoeper
Director of Social Services for the Deaf
Lutheran Mission Society

Edward T. Kilcullen
Consultant, Services to Deaf Clients
Maryland State Department of Education
Division of Vocational Rehabilitation

Leonard P. Siger
Research Associate
Baltimore City Public Schools

James S. Smith
Associate Dean of Instruction for Career Programs
Howard Community College

Jackie Stover
Liaison Worker
Baltimore City Public Schools

McCay Vernon
Professor, Western Maryland College
Editor, American Annals of the Deaf

Judith Williamson
Extension Agent
University of Maryland

Ann Marie Zalewski
Chairperson, Learning Laboratory
Howard Community College

Final Report of the Statewide Feasibility Study of Postsecondary Education for Deaf People in Maryland

In 1976, Howard Community College began an 18-month statewide feasibility study of postsecondary education for deaf people, funded by the Division of Vocational Technical Education of the Maryland State Department of Education.

This project had begun with a grant proposal originally written as a program of support services for deaf students, to be located at Howard. The college administration was at that time reluctant to administer this program without considerable investigation of the topic. In rewriting the grant, it was decided to expand the project in length, scope, and focus to a statewide feasibility study. The grant proposal stated, "Combining the facts that there are limited postsecondary educational opportunities for the deaf in the State of Maryland and that deaf students have the ability to pursue and successfully complete education at the postsecondary level, a program is proposed to determine the feasibility of providing the opportunity for deaf students to enroll in the program of their choice at community colleges within Maryland. . .and receive the counseling and supportive services necessary to successfully complete that program".

The project was placed under the supervision of the Associate Dean for Career Programs. By September, an advisory committee and project coordinator had been selected. The project coordinator established objectives for the project based on the goals of the grant, and presented a time lime for completion of project activities. These objectives and their sequence were approved by the advisory committee and the Associate Dean for Career Programs.

OBJECTIVES

The project objectives were as follows:

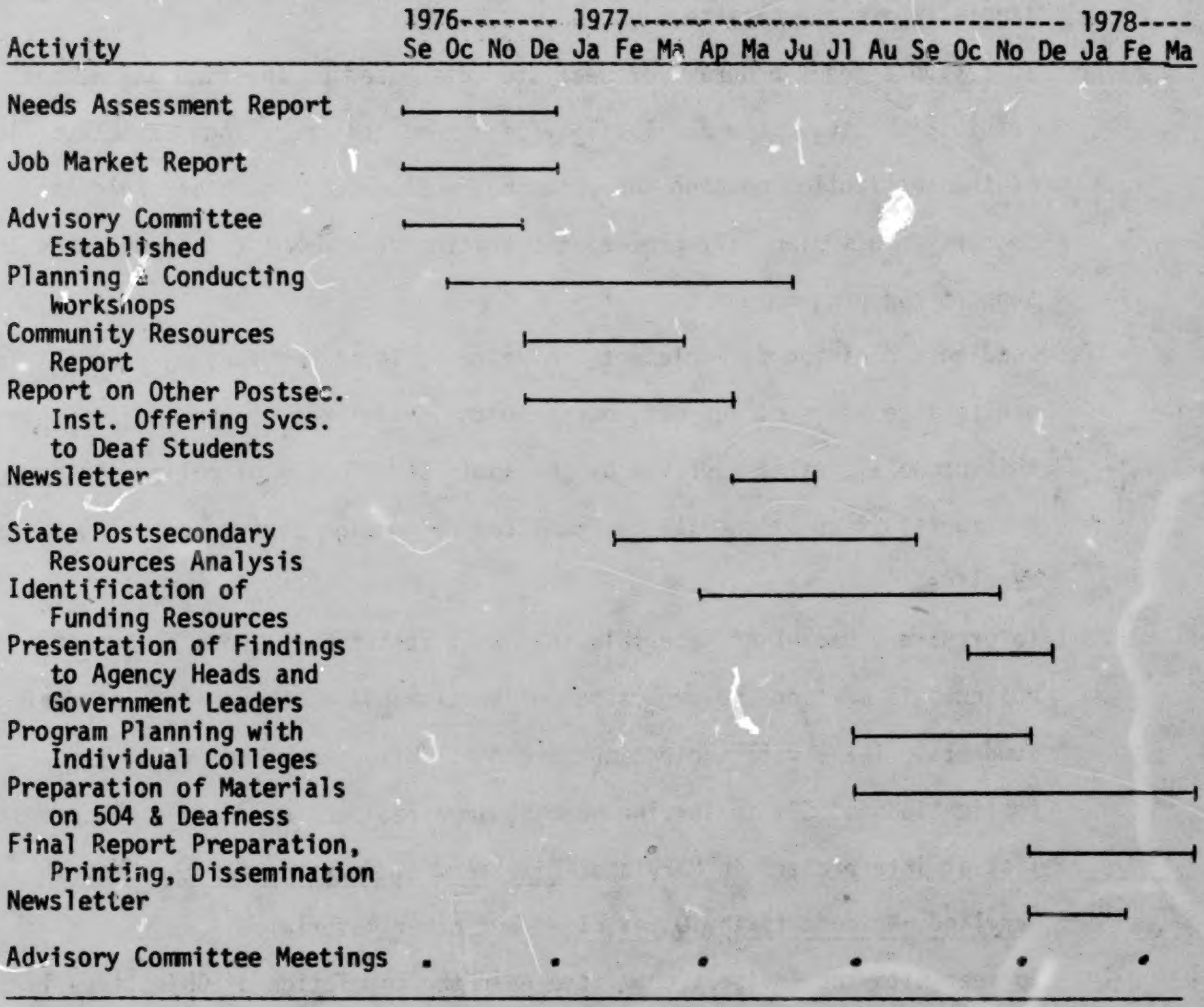
1. To prepare a written report detailing the postsecondary occupational needs of the deaf population in the state area.

2. To prepare a written report summarizing current and anticipated job availability data as a basis for selection of training programs which may be implemented.
3. To develop a resource table for identification of prospective students; interpreters; trained support service personnel, such as counselors, reading specialists, etc.; complementary programs such as interpreting training, paraprofessional training, etc.; medical, psychiatric, and housing referral; and other pertinent information.
4. To coordinate a deaf awareness workshop for the staffs of community colleges in the Baltimore/Washington D.C. area.
5. To prepare a written summary of program concerns of existing community college programs for deaf students. This report will include: prioritized support service needs as reported by program directors and community college administrations, cost per deaf student, and reasons for program failure where appropriate.
6. To prepare a written report describing postsecondary occupational programs in the State of Maryland. Analyze this information in light of the deaf community's needs, projected job market, and institutional attitude toward a program for deaf students.
7. To write and prepare for dissemination a report summarizing the information collected to date. This report will also be prepared for lecture format. It will detail the postsecondary educational needs of deaf people in Maryland; the design of a projected postsecondary program for deaf students, including services, training, equipment needed, and their costs; recommended site(s) for such a program; and resources available to institutions which agree to accept deaf students.
8. To arrange for printing and distribution of these final reports to agencies listed in the grant proposal.

9. To identify and acquire guidelines for all potential funding sources and to Recommend most likely avenues for funding.
10. To secure an implementation or non-implementation decision from administration(s) where appropriate.
11. To design a model program for deaf students based on the findings of the feasibility study, the availability of funds, the needs and characteristics of the institution housing the program, Section 504, and other relevant factors. This plan will preceed the writing of a grant to obtain funds to support the program.
12. Pending a decision to implement, to write at least one funding proposal for one to five years of support, based on the guidelines of the funding source. This proposal, after approval by the administration(s) of college(s) and/or program(s) in question will be submitted to funding source according to its deadline.
13. To prepare a packet of materials that will assist Maryland's community colleges in meeting the provisions of Section 504 as they relate to deaf students. These will include but are not limited to a summary of the implications of 504 in serving hearing impaired people; funding resources; list of interpreters in Maryland; Directory of Services for the Deaf in Maryland, Welcome to the Quiet Life, and other materials.
14. To meet with the Advisory Committee near the completion of Objectives 1,2, 3,5,6,10, and 13.
15. To review progress toward objectives quarterly with the Associate Dean for Career Programs and adjust when necessary.
16. After approval by the Associate Dean of Instruction for Career Programs and the Advisory Committee, progress reports will be released upon the completion of Objectives 1,2,3,5,6,7, and 10, as well as a report on the end of the project. These will be brief, newsletter type documents to be distributed widely.

TIMELINE

The Advisory Committee also reviewed a timeline of project activities, which was followed fairly consistently throughout the feasibility study:



The sequence of activities can be summarized as:

1. Finding out what deaf people need.
2. Finding out what community colleges need to do to assure quality postsecondary education for deaf people, especially in occupational education.
3. Presenting these findings in several formats.

4. Assisting those colleges which are recommended sites for a program in analyzing the implications of support services for deaf students.

METHOD

Each report of the feasibility study includes a description of methods used in that portion of the study. All reports issued during the project are included in this Final Report, as Appendices A through G.

Prior to each major phase of the project, the advisory committee met to give guidance to the project coordinator regarding upcoming activities. After receiving this input, the project coordinator began work on accomplishing the objectives of that time period. When each report was completed, it was mailed to the advisory committee for review. Finally, after receiving these edited drafts from the committee, the coordinator made appropriate revisions, arranged for printing, and disseminated the materials.

By the middle of 1977, most of the information had been collected on how to serve deaf students and, equally important, on the needs of deaf people. Oral presentations of the study's findings were given to three community colleges which were desirable locations for a program, according to the needs of deaf people. Administrative staff members of these three colleges had expressed a willingness to investigate the possibility of their institutions housing a program for deaf students. If the administration of an institution expressed a lack of readiness to look into such a program, the results were not presented orally. However, all community colleges received at least one copy of the feasibility study's report.

EVALUATION

The project objectives have been accomplished as of the writing of this final report with one exception which is explained below.

The project's interim reports (Appendices A-G) provide documentation of project activities. These reports were submitted to the advisory committee for comment prior to being prepared in their final form.

In addition, quarterly reviews with the Associate Dean of Instruction for Career Programs served to monitor progress and, if necessary, to make adjustments in procedure.

The objective dealing with newsletters was not fully accomplished in that one newsletter was prepared instead of several as stated in the objective. However, five articles about the study were published in journals and bulletins (see Appendix I), thus giving the study exposure to a much larger audience than would a newsletter.

Conclusions of the Feasibility Study

(A presentation of the study's findings was made to a small group of agency heads, government leaders, and advocates of the rights of deaf people. The talk has been revised from its lecture format for inclusion in the Final Report of the Feasibility Study.)

Maryland is nationally recognized for its educational opportunities for school-aged deaf children. Special education programs have long been available for students with all degrees of hearing impairment. The Maryland Schools for the Deaf in Frederick and Columbia provide a sequential, comprehensive education for deaf children from preschool through high school. Here, deaf students participate fully in the entire range of school activities and are taught by teachers specially trained to work with them. In addition, an ever increasing number of local education agencies provide educational services through special classes and mainstreaming in public schools.

What happens to these deaf children when they graduate from high school? Do they need additional education? If so, where can they receive it? What is happening in Maryland to meet the needs of these young adults and of older deaf adults who need vocational retraining, continuing education, or other postsecondary educational services?

Unfortunately, Maryland is not a leader in postsecondary education for deaf people. To study the problem, Howard Community College obtained federal Vocational Education funds from the Division of Vocational-Technical Education to conduct a feasibility study of postsecondary education for deaf adults in Maryland. The project is staffed by a full-time coordinator and is served by an advisory committee of 17 leaders in education, vocational rehabilitation, and the deaf community.

The Need

First, deaf people do need postsecondary education. The median income of deaf adults is $2,000 below that of the general population. One of the reasons is a lack of access to higher education.

Underemployment is another economic factor which illustrates the need for postsecondary education for deaf people. Deaf people are grossly over-represented in laborer and operative occupations when compared with the general population. These occupations have a projected growth of slower than average for the next decade. In professional, technical, and service occupations, which have better than average projected growth, they are grossly under-represented. Thus the employment situation among deaf adults is very nearly the reverse of a healthy growth pattern. Although other factors, such as employer attitude, significantly affect this pattern, postsecondary educational opportunities will help alleviate the situation.

A common misconception in Maryland is that most deaf adults can receive the education they need at nearby Gallaudet College. But Gallaudet is a four year liberal arts college with entrance requirements that leave out 90% of deaf high school graduates. In addition, not all deaf students, like not all hearing students, want a liberal arts education.

The only other meaningful postsecondary resource for occupational education for deaf people in Maryland is the Maryland Rehabilitation Center in Baltimore. MRC offers a variety of services for deaf clients of vocational rehabilitation. Several staff members are fluent in manual communication. With the addition of occupational training areas that require little reading, the Maryland Rehabilitation Center would be the most desirable placement for those deaf people who could not compete in a community college setting. Reasons for their inability to benefit from community college placement might include very low reading level, socialization problems, immaturity, or more than one handicapping condition. As part of the rehabilitation process, MRC's program offers services aimed specifically at placement in a job, in contrast to the more varied educational offerings of a community college or adult program.

At present, deaf people must leave the Maryland-Washington D.C. area to receive quality support services in postsecondary education, despite the existence of excellent community colleges within the state. Many deaf people go to St. Paul Technical Vocational Institute in St. Paul, Minnesota, for example. St. Paul TVI has an excellent support service system which enables deaf people to be integrated into the regular programs of the Institute. This support model also serves deaf people in approximately 50 community colleges and other postsecondary institutions throughout the country. Maryland should have at least one such program for its deaf citizens.

Many of Maryland's deaf adults choose to forego postsecondary education rather than leave their home state. Of course, this decision compounds their problems in finding employment. Vocational rehabilitation counselors serving deaf clients have maintained a strong interest in this feasibility study because of the crying need for a program for deaf students in Maryland. Ultimately, the feasibility of this program depends on funding.

Support Services

One of the greatest administrative dilemmas faced in serving deaf people is that of high excess cost of services coupled with low incidence of deafness in the population. There are about 35,000 deaf people in Maryland. Of these, about 8,300 became deaf before age 19.

Because of small numbers, it has been difficult to justify expensive hourly support services for deaf students. With the advent of Section 504, postsecondary institutions must provide program accessibility for deaf people. This concept is commonly being construed to mean interpreter services for each deaf student.

Unfortunately, experience has shown repeatedly that interpreter service alone is insufficient to truly enable the average deaf person to succeed in community colleges with hearing people. What does work for deaf people is a support service system that addresses most of the deaf person's communication, education, and socialization needs, and which involves the entire institution.

Interpreting is an hourly support service. The interpreter relays the spoken lecture and discussion to the deaf students in the classroom. Interpreters charge approximately $7.50 per hour, and are often difficult to find.

Notetaking is usually done by a hearing classmate of the deaf student. Because the deaf student must constantly watch the interpreter and instructor, if he or she has to look down to take notes, information is lost.

Counseling is a high priority support service because of the number of adjustments required of deaf students. Attendance in a mainstream situation forces a great deal of independence. In addition, the stress of attending a hearing college is often complicated by the student's need to relocate and find housing in the area.

Tutoring should be provided to help students overcome the reading handicap that accompanies prelingual deafness.

Special class instruction in basic English, math, and other subjects will be needed by most students, since the average deaf person reads at a fifth grade reading level, despite normal intelligence. Some learning materials, such as audio tapes, may have to be recorded in sign language on videotape.

Sign language classes should be available on campus for hearing students and staff. These classes are especially popular among hearing students.

Faculty and staff inservice training must be given on the implications of deafness and on working with deaf people.

All of these services are needed to make a college truly accessible for the average deaf person. The omission of any one support service will increase the likelihood that the deaf students (and hearing professionals working with them) will encounter difficulty. Again, Maryland's deaf students should have access to at least one support service system of this kind without having to leave the state. This same principle holds true for other disabilities.

The high excess cost and low incidence problem exists despite the mandate of Section 504, which states that all institutions must serve all types of disabilities. And Section 504 must be implemented despite inadequate federal support to assist institutions in serving disabled students. The situation lends itself to a regionalization effort.

Regionalization

The HEW regulations for Section 504 specifically state that (p. 22677):

> "Colleges and universities are required to make reasonable adjustments to permit handicapped persons to fulfill academic requirements, and to ensure that they are not effectively excluded from programs because of the absence of auxiliary aids. Groups of colleges may not establish consortia exclusively for handicapped students."

We may not set up regional programs for handicapped people if in doing so we deny a student's access to any other institution. For example, if a program for epileptic students would be continued at the Community College of Baltimore, that would not excuse nearby Catonsville Community College, Essex Community College, or Dundalk Community College from serving qualified epileptic students in their regular programs.

Why then, if all colleges must serve all handicapped students anyway, should regional programs be considered?

First of all, it concentrates resources in a way that is meaningful in terms of support services needed by handicapped people. By providing concentrated services in one location, disabled individuals are assured quality access to the programs of an institution. In open door institutions such as community colleges, the term "qualified" student covers a much broader spectrum than it does in Johns Hopkins Medical School. This is an obvious statement but the fiscal implications for community colleges are enormous. It means that community colleges must serve handicapped students who may need support services above a minimal level.

Second, regional programs can attract the numbers of students necessary to justify more than minimal expenditures, regardless of the funding source. Regionalization should make it easier to get the outside funding these institutions will need.

Third, regional programs can advise other institutions which are serving handicapped students on a small scale. For example, if Essex has a visually-impaired student who needs a program only offered as Essex, Catonsville's support staff for the visually impaired can advise Essex on how to serve that student's needs.

Fourth, regional programs can serve as a model for other colleges if and when adequate federal funding becomes available for Section 504.

New programs can capitalize upon successes and failures of the respective programs. These initial regional efforts can be the seeds for growing services for handicapped students, rather than an end product.

Fifth, certain regional programs for certain disabilities may be phased out as the institution's staff learns to deal effectively with that group. In the case of deafness, however, this phasing out is unlikely unless a large proportion of staff become proficient in sign language and sophisticated about the implications of deafness.

In deciding where regional programs should be located, the needs of each disability group must be the prime concern. The disparity of needs among these groups is very great. Few auxiliary needs overlap--with the exception of counseling. Colleges must work most effectively with what they already have. Attending to the needs of disabled people will enable colleges to serve more efficiently. For example, a college with an architecturally accessible campus designed with mobility impaired people in mind would be a strong candidate for a regional resource center for citizens with this disability.

Deaf students need varied occupational programs, developmental education, a large number of certificate programs (which have less emphasis on academic subjects). Therefore, a college serving them should have a very strong occupational education component.

Regional programs should be located in metropolitan areas, for easiest access by a large population. Adequate funding must be made available to assist institutions of higher education in providing more than minimal services.

Where Should a Program Be Located?

The findings of the study show that deaf people would benefit most if a program of support services were located in a large community college. There are several reasons for this. One very important reason is that, in Maryland, the largest community colleges are located in metropolitan areas to enable easy access for a large population. Another is that colleges with large numbers of students tend to have more student services than do small colleges. Student services are needed to supplement the special services which will be provided for deaf students.

The most important reason that deaf people need a large community college is that large community colleges offer the greatest number and variety of occupational training programs.

If funding limitations make it necessary to concentrate resources in only one program in Maryland, it would be unfair to deaf people to limit their options even further by having this program where they can only choose from a handful of programs. Transfer curricula are not a priority in postsecondary education for deaf adults, especially in Maryland, because Gallaudet is nearby. It is estimated that 3/4 of deaf students who would enroll in a program would choose occupational training. This ratio is based on the experience of other programs across the nation and on the needs of deaf people.

Appendix 1 of this report is a statement in support of these conclusions, which was signed by members of the advisory committee to the project.

Possible Funding Sources

Because almost all of the background research necessary for submitting grant proposals has been completed as part of this study, the search for funding of a model regional program for deaf students is greatly simplified.

The following funding sources may be able to assist colleges in acquiring funds. A combination of sources will be needed.

The Division of Vocational Rehabilitation: Client service funds, which are provided on an individual case basis, can help institutions accomodate deaf students with certain support services, usually interpreting. Also available are Innovation and Expansion grants, which require a 10% match.

The Division of Vocational-Technical Education: Seed monies may be obtained for special programming or support services related to occupational education for disabled students. A 50% match by program is required in Maryland.

The Division of Special Education administers funding provided under Public Law 94-142, the Education for All Handicapped Children Act. This law guarantees education for disabled individuals up to the age of 21. Therefore, although the Division is not currently funding programs in higher education, it is a possible funding source.

The Division of Instruction's Adult Education section receives funds from the federal government of which 10% must be set aside for handicapped populations. Adult programs might look to this source of funding for serving deaf people.

The Bureau of Education for the Handicapped, a bureau of the United States Office of Education, administers funding for regional programs for handicapped students. The individual at BEH responsible for this funding is Melvin Ladson.

TRIO Funds, administered by the United States Office of Education, comprise three separate programs: Upward Bound, Talent Search, and Special Services for Disadvantaged Students. Disabled students are considered disadvantaged for the purposes of this last program category.

Foundations: Foundation funding may be available for special services projects in higher education. No large foundation specializes in services to disabled individuals.

Proposed Budget of a Program for Deaf Students

(at 20 - 40 students)

Notes:

1. Increase in student enrollment above 40 would require the addition of one full-time interpreter and the increase of staff time to one full-time instructor and one full-time counselor. This increased staff level could support up to 80 students.

2. This budget assumes continued Vocational Rehabilitation support for interpreters for deaf clients. The interpreter figure of $10,000 is intended to cover student activities attended by deaf students and courses taken by deaf persons who are not clients of DVR. Without DVR support for interpreters, the budget could be $30,000 larger.

3. The 50% match required by the Division of Vocational Technical Education would require a large commitment of other institutional resources.

Proposed Budget

(Note: Salaries will depend on college scale)

SALARIES	Amount
Project Director	18,000
Secretary-Interpreter	11,000
1/2 time Counselor	8,000
Part-time Instructor	8,000
Subtotal Salaries	45,000
Benefits @ 20%	9,000
Total Salaries	54,000
WAGES	
Interpreters and Notetakers (variable amount)	10,000
MATERIALS AND SUPPLIES	
General Office Supplies	500
Office Equipment	2,500
Media Materials	1,000
Library Accessions	100
OTHER EXPENSES	
Communications (including lease of portable teletype and purchase of telephone amplifiers)	1,000
Conference, Workshop, Travel (including in-service training, and use of college vehicle)	1,000
Printing and Advertising	400
Dues and Subscriptions	100
TOTAL	70,600

4. If the project is fully funded, if full support services are provided, and if the program is located in one of the four largest community colleges, projected enrollments are as follows:

Year 1: 20 students
Year 2: 35 - 40 students
Year 3: 50 - 55 students
Year 4: 60 - 70 students
Year 5: 70 students

Appendix A
of
Final Report

Report 1: Needs Assessment of Postsecondary Education for Deaf People in Maryland

ACKNOWLEDGEMENTS

This report was made possible through the assistance of many people in several agencies.

Many thanks are due the project advisory committee for their assistance as individuals and as a group. Special thanks to James S. Smith, Associate Dean of Occupational Programs at Howard Community College for his support and help.

In addition, many other individuals not directly associated with the project gave their time and effort to the project.

Deepest appreciation goes to the following individuals:

Harold Bible
Ruth Brown
Frank Bryan
Charles Buemi
Norma Buemi
Lillian Clark
Dr. John Cobun
Edward Corbett
Dr. David Denton
Joseph DeSantis
John Diller
Dr. Roland G. Frank
Gertrude Galloway
William Haig
Ellen Hankin
Edward Kilcullen
Toby King
Nancy Krupnick
Jane Lind
Janet Merrick
Brenda Rawlings
Dr. Leonard Siger
Sandra Siger
James S. Smith
Richard Steffan
Jackie Stover
Bessie Tress
Dr. McCay Vernon
Rae Walker
Charlene Wenckowski
Judith Williamson
Frank Windsor
Anne Marie Zalewski

And finally, thanks to the administration and staff of Howard Community College for their interest and support.

TABLE OF CONTENTS

Acknowledgements i

List of Tables iii

List of Appendices iv

Implications of National Data. 1

  The Deaf Population of the United States. 1

  Distribution of Postsecondary Programs for Deaf Students. 2

Determining the Nature of Maryland's Postsecondary Needs 3

  The Deaf Population in Maryland 5

  Education 7

  The Vocational Rehabilitation Caseload. 8

People's Opinions About Needs. 14

  Vocational Rehabilitation Counselors. 15

  Parents' Opinions. 17

  A Needs Assessment in Baltimore 23

  Interviews with Deaf People Statewide 24

Summary and Recommendations. 29

  The Typical Community College Program for Deaf Students 31

  Comprehensive Programs. 32

  Adult Basic Education 34

  Community Services. 35

  Locations 35

References 37

LIST OF TABLES

Table 1

Estimates of the Number of Persons in Maryland with Hearing Impairments. 5

Table 2

Recent Graduates of the M.S.D. and the M.S.S.D. 6

Table 3

Ages of Deaf Vocational Rehabilitation Clients Fiscal Years 1975 and 1976 10

Table 4

VR Clients in Training, Fiscal Years 1975-1976. 12

Table 5

Some Measures of Maryland's Deaf Population 30

LIST OF APPENDICES

Geographic Distribution of Vocational Rehabilitation's Deaf Clients in Maryland, 1975-1976. . . . . .Appendix A

Geographic Distribution of Community College Programs for Hearing Impaired Students in the U.S.. . . . . .Appendix B

Questionnaire Materials, Maryland School for the Deaf Parent Survey. . . . . .Appendix C

Interview Materials for Interviews with Deaf People . . . . . . .Appendix D

Advisory Committee to Feasibility Study . . . . .Appendix E

Definitions of Hearing Impaired, Hard-of-Hearing, and Deaf from the CEASD. . . . . .Appendix F

NEEDS ASSESSMENT OF POSTSECONDARY EDUCATION FOR DEAF PEOPLE

The Division of Vocational Technical Education of the Maryland State Department of Education has funded a project to conduct a statewide feasibility study of postsecondary education for deaf people. The focus of the project is occupational training, especially as offered by two year colleges in Maryland.

This report, an analysis of the postsecondary educational needs of deaf people in the state of Maryland, is part of the project's first phase.

Implications of National Data

The Deaf Population of the United States (Schein and Delk, 1974) describes the results of the National Census of the Deaf Population (NCDP), conducted in 1972. Many of the findings are relevant to an assessment of needs.

A much smaller percentage of deaf people attend college than in the general population. About 12.2% of the deaf people in our region have attended some college, in contrast to more than one-third of the general population. The median income of deaf persons ($5,915 per annum) is over $2,000 short of the median for the general population ($8,188). In view of the positive relation between years of education and income, it follows that increased postsecondary opportunity would help diminish this large gap in personal income.

The employment picture for deaf people also supports the necessity of providing occupational training to deaf people on the postsecondary level. Deaf people are over-represented in many occupations which have poor employment prognoses for the 1980's, and under-represented in professional, technical, and managerial occupations. One means of changing the situation is through continued education. Schein and Delk state, "Assuming the economy does develop as BLS [Bureau of Labor Statistics] envisions (and the agency does have a good prior record for prognostication), then greater attention must be given to the education and training of young deaf persons" (p. 98).

Projections for postsecondary educational needs of the nineteen-year-old deaf population were made in the NCDP. For 1978, the figures indicate the need for 5,498 deaf nineteen-year-olds in the United States to be trained in technical-vocational programs such as those offered by community colleges. Maryland's share of this national figure is 106. In addition, 2,029 nineteen-year-old deaf people (39 in Maryland) are seen as needing "comprehensive" education, which uses special facilities for those with low educational potential. A new community college program in the state of Maryland might have difficulty meeting both types of needs; this problem will be discussed at more length later in the report.

Distribution of Postsecondary Programs for Deaf Students. According to Rawlings and Trybus (1976), there are 43 programs for hearing impaired students in the United States. A program for the hearing impaired was defined by the following criteria: It must have a minimum of ten full-time students and a director who works at least 50% of the time in the deaf program; it must exist within an accredited postsecondary institution; it must accept students directly from high school; and it must be administered in accordance with the Principles Basic to the Establishment and Operation of Postsecondary Education for Deaf Students of the Conference of Executives of American Schools for the Deaf. The programs which met these criteria serve 2,900 deaf students in the United States.

The presence of Gallaudet College may lead educators to believe that the postsecondary needs of deaf people are being met locally. However, Gallaudet was not intended to serve the needs of most deaf people; it is a national program whose selective admissions criteria make it an impossible choice for a vast majority. Also, since it has a four-year liberal arts curriculum, technical education and occupational training are not available. Gallaudet does not grant Associate of Arts degrees or certificates for those who desire a shorter training time. Alternative postsecondary programs for deaf individuals are needed in Maryland.

The closest community college program to Maryland, located in the Community College of Philadelphia, serves 18 hearing impaired students. Currently, there are no programs in Virginia, West Virginia, Maryland, Delaware, or the District of Columbia. Since Delaware's population is densest in the northern end of the state, the program at the Community College of Philadelphia can serve the needs of most of Delaware's deaf people, as well as those in eastern Pennsylvania and southern New Jersey.

The existence of two large population centers in Maryland justifies the establishment of postsecondary education for deaf students here. It is not difficult to grasp the need for such a program. Equal educational opportunity for handicapped people should certainly extend to the post-secondary level. The data gathered for this report attempts to clarify the extent and nature of the need.

Determining the Nature of Maryland's Postsecondary Needs

In assessing the need for postsecondary education among Maryland's deaf population, several factors must be considered. First, there is no registry of deaf persons in the state. Without a measure of the exact number of deaf people, other measures must be used. Second, some commonly used research methods are not valid when attempted with a deaf population. Telephone surveys, written questionnaires, and interviews present methodological problems because of the nature of the handicap.

Since no agency has comprehensive information on all deaf people, a variety of methods were used to determine their needs for postsecondary education. These methods were devised and discussed with the project advisory committee prior to their implementation.

Sources of needs data included the Maryland State Department of Education's Division of Vocational Rehabilitation, the deaf community, and education agencies including the Maryland School for the Deaf, the Model Secondary School for the Deaf, and Gallaudet College's Office of Demographic Studies.

The Division of Vocational Rehabilitation supplied extensive computerized information on the deaf caseload for fiscal years 1975 and 1976. An analysis of these data provided insight into the location and characteristics of deaf and hard-of-hearing clients of DVR, as well as services being offered them. Eight vocational rehabilitation counselors assigned to deaf caseloads were interviewed about the needs of their caseloads and other issues related to postsecondary education. These counselors also retrieved information from their files on the location of their clients' training services during the past two years.

The Maryland School for the Deaf, the Model Secondary School for the Deaf, and Gallaudet College's Office of Demographic Studies summarized numbers of school-aged population being served and sizes of recent graduating classes. The Maryland School for the Deaf assisted the study by providing information on the career aspirations of its current high school students. In addition, a questionnaire was administered to parents of M.S.D.'s high school students to obtain input from parents of deaf children.

Information from the deaf community included 106 interviews of deaf individuals from all over the state. These interviews were conducted by deaf people and by hearing people who sign proficiently. Although the sample is not a random one (interviewers made the contacts themselves), an effort was made to interview subjects who varied in age, education, occupations, and geographic location.

The Deaf Population in Maryland. Based on categories and prevalence rates calculated in the 1972 National Census of the Deaf Population (Schein and Delk, 1974), the population of deaf individuals is shown in the following table, supplied by the Office of Demographic Studies of Gallaudet College. "Significant Bilateral Loss" refers to hearing losses "in both ears, the better ear having some difficulty hearing and understanding speech." "Prevocationally Deaf" refers to those individuals who became deaf (i.e. unable to hear and understand speech) before age 19. (Schein and Delk, 1974, p. 133). The number of deaf people in Maryland is 35,208 but incidence rates by age are not available.

Table 1

ESTIMATES OF THE NUMBER OF PERSONS IN MARYLAND WITH HEARING IMPAIRMENTS

Age	Total Population	Hearing Loss: Significant Bilateral Loss	Hearing Loss: Prevocationally Deaf
Under 5 years	281,000	700	100
5 to 17 years	1,005,000	8,600	1,900
18 to 44 years	1,640,000	19,300	2,300
45 to 64 years	832,000	37,300	1,900
65 years and over	340,000	59,000	2,100

Data on school-aged hearing impaired children in Maryland was obtained from the Office of Demographic Studies' survey of educational programs in Maryland. With three local education agencies not reporting (Carroll, Dorchester, and St. Mary's counties), the figure given is 1,290. This number differs from the 1,900 prevocationally deaf school-aged figure cited in Table 1, and there are several possible explanations for the discrepancy. In addition to the above local education agencies not reporting, there may be other agencies whose record-keeping does not show concise information on hearing loss. The current controversy regarding "labelling" of handicapped children may serve to obscure some data. As an invisible handicap, deafness often goes undetected during early childhood. Also, the 1,900 figure includes the multihandicapped deaf population, who may be receiving services other than public school education.

The two largest secondary programs for deaf students in the Maryland-Washington, D.C. area are located at the Maryland School for the Deaf (M.S.D.) in Frederick and the Model Secondary School for the Deaf (M.S.S.D.) in the District of Columbia. These two programs graduate potential community college students every year. Total numbers of graduates of the two schools are shown in Table 2.

Table 2

RECENT GRADUATES OF THE M.S.D. AND THE M.S.S.D.

Year	Number of Graduates, Both Schools
1974	71
1975	53
1976	35
1977 (projected)	67
Average:	57

These numbers represent the minimum number of annual deaf high school graduates. In addition, a growing number of local public school programs will be graduating hearing impaired students from secondary schools. It must be noted that the M.S.S.D. serves a five state area (Maryland, Virginia, West Virginia, Delaware, Pennsylvania, plus the District of Columbia). However, since no community college has an established program for deaf students in Virginia, Delaware, West Virginia, Maryland, or the District of Columbia, a high quality program located in Maryland would probably attract some of the M.S.S.D.'s out-of-state graduates. According to several vocational rehabilitation counselors, many young people would prefer a program closer to home than those currently available. Of the 1976 graduates of both the M.S.D. and the M.S.S.D., three-fourths attended a postsecondary program of some kind. This may be an unusually high proportion of a graduating class, however, and might not be maintained as a continuing trend.

Gallaudet College anually admits approximately 150 to 200 students to its preparatory class, a pre-freshman year of remediation. According to Gallaudet's Director of Admissions, Dr. Bernard Greenberg, about 20% of the class, or 35 to 40 students, do not enter the freshman class for a variety of reasons. Some of these students stay in the Maryland area and are prime candidates for a two year program. They may choose to enter an occupational training program at a community college, or they may take a transfer program from which they could enter Gallaudet or the National Technical Institute for the Deaf.

Education. Because of the language handicap which deafness imposes (Vernon, 1971), deaf people have a lower reading level than that of the general population, despite normal intelligence. The average reading level for 1975 and 1976 graduates of the M.S.D. and the M.S.S.D. is grade 5.5. This statistic compares favorably with national data on reading level from a 1971 study by the Office of Demographic Studies (ODS, 1972). In this study, the reading levels for 17, 18, and 19-year-old deaf students were averaged for a resulting grade score of 4.2. A more in-depth look at the implications of the reading problem for community colleges will be included in a later report describing various postsecondary programs for deaf students throughout the country. For the purpose of assessing needs, however, it is useful to know that local graduates of two large secondary schools are achieving at somewhat above the national average.

The Vocational Rehabilitation Caseload

The Maryland State Department of Education's Division of Vocational Rehabilitation supplied data on hearing impaired cases served by the Division during fiscal years 1975 and 1976. Clients of vocational rehabilitation are not necessarily typical of the general deaf population. However, The National Census of the Deaf Population found that slightly more than half of the deaf population has used the services of vocational rehabilitation at one time or another. Two-thirds of deaf people are aware of the agency and its function (Schein and Delk, p. 87). Since one of the agency's functions is to enable handicapped people to acquire occupational training, it is a source of possible referrals and would play a major consumer's role in a postsecondary program for deaf students.

Unless otherwise specified, data to be cited is based on clients classified as deaf, speaking or non-speaking, who did not have mental retardation or emotional disturbance listed as an additional disability. Although there are always exceptions among handicapped people, it was felt that in almost all cases these individuals would have difficulty functioning in a community college setting without extensive supportive services in addition to those needed by deaf people with no additional handicap.

There were 1,634 deaf clients served during this period. An additional 128 deaf clients were classified as mentally retarded and/or emotionally disturbed.

Baltimore City had the largest number of cases (398) of any of the political subdivisions in the state. Baltimore City and Baltimore County's combined cases came to a total of 469.

Montgomery and Prince George's county combined had a caseload of 435. These two counties had the largest numbers of VR clients among Maryland's counties. Data was not obtained from Washington, D.C., which has a separate VR agency, but there are undoubtedly a large number of cases there as well.

As would be expected, the largest numbers of VR clients are located in the population centers of the state. The exception to this pattern is Frederick County, which has a relatively large number of clients (148) due to the presence of the Maryland School for the Deaf.

A map showing the Distribution of VR clients in the state is included in this report (Appendix A).

In addition to the deaf clients served by VR, there are 1,255 hard-of-hearing clients who were served during the same period. These clients can benefit from the same support services used by deaf clients, although many of them will not use all of the services. For example, not all hard-of-hearing people would want or need the use of an interpreter, but virtually all could benefit from a notetaker so that they could attend visually to the speaker's face. Counseling and faculty orientation to hearing loss are other services which would benefit the large numbers of hard-of-hearing clients.

Among deaf clients, 51% were males and 49% were females during the 1975 and 1976 fiscal years.

The ages of deaf clients were also computed. Fifty percent of the deaf clients were of ages 18 through 30. This high proportion may be related to the unemployment rate among deaf people of this age group, which is higher than that of other age groups (Schein and Delk, 1975, p. 76). Age distribution of vocational rehabilitation clients is shown in Table 3.

Table 3

AGES OF DEAF VOCATIONAL REHABILITATION CLIENTS
FISCAL YEARS 1975 AND 1976

Age	Number of Clients	Percentage
0-18	67	4
18-30	823	50
31-45	313	19
46-60	224	14
60 or older	207	13
Total	1,634	100

The large number of cases age 18 to 45 could result in a substantial number of referrals from VR counselors to a community college program for deaf students within the state. The National Census of the Deaf Population found that, of deaf people who sought assistance from vocational rehabilitation, half were seeking opportunities for education or training (Schein and Delk, p. 87). If this desire for training is as strong in Maryland, there could be as many as 500 clients aged 18 to 45 in the state who need some kind of postsecondary education. This figure does not include the portion of the deaf population not served by VR during fiscal years 1975 and 1976.

The validity of the data on years of education of clients as reported by the computer is questionable. A large number of cases were either not reported (118) or were reported as zero years of education (389). Although some of the cases may never have attended school, it is unlikely that 389 of the total 1,639 deaf cases received no education. Another problem encountered was that several clients who attended two year colleges were listed as having had a very limited previous education.

Despite these limitations, the results are interesting. Discounting the large number of "zero education" clients reported, the median of years of education was computed. The resulting figure of 11 years is very close to the national figure for median years of education among deaf people (11.1 years).

The Division of Vocational Rehabilitation purchases services so that clients can have access to postsecondary education which will prepare them for their vocational objective. The VR counselor can classify most types of training received into one of several categories: two year college, four year college, private vocational school, public vocational school, other academic program, business school, rehabilitation center, tutorial, Maryland Rehabilitation Center, personal/vocational adjustment training, or on-the-job training.

The following chart shows the number of clients who received each category of training.

Table 4

VR CLIENTS IN TRAINING, FISCAL YEARS 1975-1976

Type of Institution	Number of Clients (f.y. 1975 and 1976)
Two year college	23
Private vocational school	30
Public vocational school	11
Business school	7
Four year college	129
Maryland Rehabilitation Center	51
Rehabilitation Center, other than Maryland	18
Personal/vocational adjustment	14
Tutorial	0
Other Academic	27
Total	310

The absence of a community college program in Maryland is reflected by the small number of clients who attended two year colleges: 23 clients or 1.4% of the total deaf cases. More deaf clients attended private vocational schools than community colleges.

Three times the number of 2-year college clients were served by a rehabilitation center (69 clients). Several counselors working with deaf clients have stated that some of their clients had gone to a rehabilitation center because there was no local community college program for them. Counselors were asked to count the number of their recent deaf clients who could have benefited from a new postsecondary program in Maryland. Their reports indicated that more than 100 clients could have used the services of such a program during the past two years.

Many of the curricula offered by business schools and private vocational schools are also available at community colleges. When the figures for these training placements are combined with the number of clients attending a two year college, the total is 71. Certainly some of these clients could benefit from a community college program.

The largest number of clients in training were four year college students. Maryland's proximity to Gallaudet may contribute to high attendance among Maryland's deaf people. Also, it is possible that those qualified to go to Gallaudet are encouraged to seek assistance from Vocational Rehabilitation and may do so in disproportionately high numbers.

Since the computer could not provide information on locations of training programs attended by clients, counselors were also asked to supply this information on their caseload for the past two years (approximately January 1975 to present). The totals do not coincide with the totals given by the Division's computer since a large number of deaf clients have counselors who are not trained as counselors for the deaf. For example, only 48 of the 129 four year placements are accounted for in counselor's data. However, some of the data is useful. The four most-used postsecondary educational institutions were Gallaudet, the National Technical Institute for the Deaf in Rochester, New York, the Maryland Rehabilitation Center, and the St. Paul Technical-Vocational Institute in St. Paul, Minnesota.

Besides these institutions, a wide variety of training sites were named, with small numbers of clients in each location. These sites included public and private vocational schools and a few community colleges.

According to one vocational rehabilitation counselor who had placed some clients in such schools, these cases are often clients who need or want training very badly, but who could not attend programs far from home. The Division of Vocational Rehabilitation usually provides funds for an interpreter and tuition fees so that the client can attend.

Limited information was available on the occupations of clients after training. The coding used is based on the Dictionary of Occupational Titles, so that specific occupations are named. In this study, occupations were listed for those clients who attended two year colleges, four year colleges, private vocational schools, public vocational schools, and the Maryland Rehabilitation Center. Fifty-nine percent of those in training in all of these categories did not have occupations reported for after their training. Many of these clients were still in training at the end of the fiscal year, or for one reason or another, their cases were not closed.

Of the remaining 41% of clients whose occupations after training were reported, most were placed in clerical positions of some kind. Half of those who attended a four year college and then entered the work force found positions in professional and technical occupations. The remainder fell into the same pattern as those educated in other educational institutions: most were clerical workers, and somewhat smaller numbers were in craftsman and operatives occupations. It is difficult to draw conclusions about placement from this data, since the data does not tell how many of the clients completed the courses of study taken at each location.

People's Opinions About Needs

In addition to data on numbers of people, the opinions of several groups of people were sought regarding the needs for postsecondary education among Maryland's deaf population. Vocational rehabilitation counselors and deaf people from all over the state were interviewed, and parents of high school students at Maryland School for the Deaf were sent a questionnaire.

Eight vocational rehabilitation counselors in Maryland have been identified as counselors working with deaf caseloads. These counselors were interviewed regarding the training needs of deaf people in Maryland. Two of the counselors had recently left the service of The Division of Vocational Rehabilitation, but because both had served deaf caseloads for two years or more, they were interviewed. Interviews were conducted individually, in most cases at the office of the VR counselor.

Each counselor reported on the needs of his or her individual caseload only, not on the statewide postsecondary needs of deaf people. Thus the regional needs of VR clients can be analyzed according to their counselor's perceptions.

"What are the training needs of your caseload?" Counselors responded to this question differentially by region. Three counselors in the Baltimore metropolitan area cited a training facility similar to the Maryland Rehabilitation Center as the top priority need, preferable to a community college program. All three mentioned a need for instructors who were well trained in communicating with deaf people in such a facility. Other needs included personal adjustment training and apprenticeship opportunities for clients.

Counselors representing Prince George's, Montgomery, and Anne Arundel counties felt that their caseloads could benefit most from a community college program. Clients who were mentioned as possible community college candidates were Gallaudet drop-outs, printers who may need retraining, students who may want to transfer to a four year institution, and hard-of-hearing clients who need counseling services. The St. Paul Technical-Vocational Institute program for deaf students was mentioned as a model for a community college setting by all three counselors. Although St. Paul TVI is not located in a community college, the services provided there are similar to support services offered in a community college.

The western Maryland caseload includes a large number of young deaf clients who are registered as VR clients while attending the Maryland School for the Deaf. In addition, there is a regular caseload of clients from Frederick, Washington, Alleghany, and Garrett counties. The counselor from this region emphasized the importance of providing a wide range of community college opportunities for deaf students, and expressed a desire to have an apprenticeship program available for deaf students.

Because of the low incidence of deafness and the sparse population of the eastern shore, few deaf clients have been referred to the counselor for the deaf in this region. The few cases he has received have been multihandicapped individuals, and his recommendations reflect this fact. Emphasis for such clients should be on independent living skills and socialization training.

"Where in the state should a community college program or programs be located?" All counselors stated that one or both of the metropolitan areas should have a community college with a program for deaf people. One counselor suggested a centralized location for services, with cooperative programs in community colleges and other vocational-technical programs throughout the state.

"What support services should a community college have so that deaf students could be guaranteed quality education?" All counselors mentioned a strong counseling component as a vital part of a community college program. Interpreters were recommended by all counselors except the one who served a few very low-functioning clients.

The third most-mentioned service was a remedial program in language, reading, math, consumer information, and or independent living skills. The implication of this recommendation is that there would be some special classes for deaf students, this is a common practice in community college programs for deaf students. Most two year programs for deaf students in the United States do offer such courses (Rawlings and Trybus, 1976).

Tutors were mentioned by over half of the counselors as a desirable feature for a program. Other services recommended by one or more counselors were notetaking, vocational evaluation, faculty orientation to deafness, sign language classes for hearing people, and audiological services.

"Should students have supervised housing?" Counselor's opinions were divided on this issue. Most counselors felt that some of their clients need it, and one felt that none of hers did. Two counselors suggested the practice used by St. Paul Technical-Vocational Institute of assisting students in finding housing and learning to live on their own for the first semester of students' attendance.

Parents' Opinions

During the interviews, several VR counselors remarked that some of their young deaf clients were in need of two year occupational training, but their parents, for a variety of reasons, would not permit them to go far from home to receive it. Since there is no community college occupational training available in Maryland, some of these clients were unable to attain their full potential, and either accepted positions in unskilled occupations or remained unemployed.

Parental involvement in the decision-making process plays an important role in the selection of a site for postsecondary programs. To obtain opinions from parents on the needs of deaf students for postsecondary education, the project coordinator attended a meeting of the Maryland School for the Deaf's Parent-Teacher-Counselor Association in Frederick, Maryland. At the meeting, she explained the purposes and goals of the feasibility study and invited parental involvement in the project. Unfortunately, the meeting took place on the day after a flood which devastated downtown Frederick; statewide news coverage of the flood had a substantial negative impact on attendance at the meeting.

Subsequently, a questionnaire was devised to be mailed to parents of M.S.D. students in the advanced department, which serves children of high school age. A letter of explanation preceded the mailing of the questionnaire by several days. Both this letter and a cover letter for the questionnaire were mailed on Maryland School for the Deaf letterhead, with the signature of Dr. David M. Denton, Superintendent of the school. Self-addressed, stamped envelopes were enclosed with the questionnaire to encourage parent participation in the survey.

Copies of the letters and the questionnaire are included in Appendix C. To avoid the problem of infringing on the privacy of parents, they were not asked their names. Parents were asked their county of residence, the age of their deaf child, and if they themselves were hard-of-hearing or deaf. It was assumed that one parent would complete the questionnaire.

Returned questionnaires were analyzed by Ms. Ellen Hankin, a graduate student at Western Maryland College, in partial fulfillment of a graduate course requirement.

The design of the questionnaire posed several difficult problems. First, the diversity of the target population required that questions be worded and placed in a layout that would be understood by less educated parents but not insulting to more highly educated parents. To assure a reasonable response rate, brevity was extremely important. Explanations of terms and long lists of alternative responses would more than likely intimidate many parents and result in a low response rate. Therefore, the questionnaire was very brief. Problems of ambiguity in two cases resulted from these efforts.

The response rate for the survey was 55%.

In response to the question, "Do you think your child should receive more education after graduation from high school?" 91% answered "yes". This high degree of interest in postsecondary education could be due to a tendency in interested parents to return questionnaires, whereas disinterested parents may tend to discard them. However, there is a strong possibility that parents in general are aware of the need for postsecondary education among their children.

The next question was worded as follows:

"In your opinion, what kind of education should your child receive?

____Basic Education (Language, reading, math, etc.)

____Job Training (vocational-technical)

____4 year College (Bachelor's degree)

____2 year College (Associate of Arts degree)

____How to live on his/her own (Independent living skills)

____Other"

The students who analyzed the responses felt that the omission of the words "after graduation" at the end of the question caused misunderstanding among the respondents. If this is true, it would be impossible to measure to what extent this confusion occurred. Responses indicated that 73% of the parents would like their children to receive job training/vocational-technical education; 45% favored education in independent living skills; 35% thought that basic education was a need; 28% would like their children to attend a 4 year college; 8% favored a 2 year college; and 5% listed other responses, including graduate school, art school, and remedial work leading to college entrance. The total percentage exceeds 100% because some parents chose more than one response.

The large response in favor of "job training (vocational-technical)" indicates that parents want their children to have some kind of occupational training. Even if the question is ambiguous as to secondary or postsecondary emphasis, it is nonetheless likely that parents who are so strongly in favor of postsecondary education (91%) would be interested in a postsecondary program offering this type of training. The same principle can be stated in relation to training in independent living skills, which might be continued as postsecondary education if the student did not master them upon graduation. Twenty-eight percent of parents aspire to a four year college program for their children. Acutally, only 6.4% of the adult deaf population have achieved four or more years of college (Schein and Delk, 1974, p. 58). Many parents apparently have unrealistic hopes for the futures of their children.

A comparatively small percentage (8%) thought that their children should attend a two year college. Although it is possible that this figure reflects a disinterest in community colleges, it is more likely that the lack of services for deaf students in Maryland's community colleges make them seem like an undesirable placement at the present time. The strong interest shown in vocational-technical education (73% in favor) is in sharp contrast with the lack of interest in two year programs. It is also conceivable that parents of deaf children are not aware of the vocational-technical options available at community colleges.

Answers to the next question in the survey support this idea. Parents were asked, "If you had a choice of college or vocational schools, where would you want your child to attend? Please write the name of your first, second, and third choices of college and/or vocational schools." In designing this question, consideration had been given to listing all possible programs and asking parents to check the institution of their choice. This method was eliminated because, to be fair, it would involve listing every community college and vocational school in Maryland, as well as schools throughout the country which serve deaf students. The list would include the names of at least eighty institutions, and it was feared that parents would tend not to answer it.

The form of the question ultimately used (open-ended first, second, and third choice format) had the same result: parents tended not to answer. Of the total respondents, one-third either did not answer or commented that they did not feel qualified to answer because of their lack of knowledge about available programs.

Of those who did respond to this question, 68% listed Gallaudet College as either a first, second, or third choice. A few respondents who favored vocational-technical education chose Gallaudet, which is a four year liberal arts college. The National Technical Institute for the Deaf was listed as a first, second, or third choice by 42% of those who answered the question. Other responses were widely scattered among many kinds of postsecondary programs.

The large number of responses indicating Gallaudet and the N.T.I.D. reflect parental awareness of these two programs. Gallaudet and the N.T.I.D. are the largest programs for deaf students in the United States and it is logical that they would be the best known. However, because of their selective admissions criteria, they are not feasible choices for the large numbers of children whose parents indicated them.

There could be several reasons for parents' choosing Gallaudet and N.T.I.D. with such frequency. Some parents may have been anxious to please and therefore wanted to list some kind of program, some may not be aware of the stringent entrance requirements of the two schools, and some may think that these are the only options available to deaf young people. In any case, there is a need for parents to have a greater awareness of postsecondary options for deaf people. A new postsecondary program should include the parents of school aged deaf children in its dissemination of information activities.

The fifth and sixth questions asked related to the child's future career. Parents were asked, "What kind of job would you like to see your child choose for a career?" and "What kind of job would your child like to choose for a career? Responses were varied. For the purposes of this study, the occupations listed were grouped into 3 categories: Group 1 consisted of occupations requiring four years or more of postsecondary education such as teaching and social work; Group 2 were occupations such as craftsmen and office occupations which are best trained for in a 2 year program; Group 3 occupations require no training, as in fast food service and janitorial service.

Twenty-three percent of the parents would like to see their children in fields requiring 4 or more years of postsecondary education, 59% hoped for career choices which required about two years of training, and 4% aspired to occupations which required no training. Twenty percent stated that they would agree with whatever the child wanted, and 13% were undecided about their own aspirations for their children.

According to this data, most parents aspire to occupations for which community colleges provide training. The very low number of parents aspiring to unskilled occupations lends further credence to their desire for continued education for deaf youth.

The career aspirations of deaf high school students, as viewed by their parents, show a slightly more pessimistic picture. The 27% who aspire to Group 1 occupations roughly coincide with the 23% of parents who want this. However, only 37% of parents see their children aspiring to occupations which require two years of training, in contrast with the 59% of parents who have such aspirations. As with their own feelings about their children's future, few parents (12%) think that their children want low skilled occupations. Finally, more than one-third think their kids are undecided.

The final question of the survey asked parents, "Has your child shown any interest in continuing his/her education after graduating from M.S.D.?" Parents answered that 56% had detected some interest on the part of their children; 9% had noticed that their children were not interested; 21% felt that their children were undecided; and 13% did not know how their children felt on the subject.

The fact that more than half of the parents detect an interest on the part of their children is a promising indication for postsecondary education for deaf students.

A Needs Assessment in Baltimore

In May 1975, a meeting was held at the Maryland Rehabilitation Center in Baltimore to assess the city's continuing education needs for deaf adults. The assessment, a cooperative effort of the Baltimore City

Department of Education, Gallaudet College, and the Baltimore Council of Organizations Serving the Deaf, was conducted via the Phi Delta Kappa model. About 50 participants were divided into three groups representing deaf adults, professionals in the field of deafness, and professionals in adult education. About 25 of the participants were deaf.

Top priority was given to the reduction of unemployment, which has obvious implications for postsecondary training programs. The summary of the needs assessment mentions "training in vocational and technical skills, placement, counseling, awareness on the part of employers as to deaf people's abilities, employment application procedures, etc."

Second priority was "'improved communication and interaction between deaf and hearing persons', indicating a need for more opportunities for sign language classes for hearing people, opportunities for meaningful integration, deaf awareness on the part of the hearing community, etc." Access to postsecondary education would help deaf people and hearing people to make progress toward this goal.

Third priority, improvement in language skills, relates to the establishment of adult basic education programs for deaf people.

Interviews with Deaf People Statewide

One hundred six deaf people residing in Maryland were the subjects for interviews concerning their postsecondary needs. One purpose of the interviews was to put the project in contact with deaf people and vice versa. The people interviewed are not a random sample of the deaf population, so generalizations and predictions will be limited. However, the interviews give an idea of the interest among deaf people in postsecondary education and their opinions on the kinds of support services which should be provided.

Often, deaf consumers are not asked their opinions about programs designed for them. In some cases this lack of an attempt to get their opinions may be due to paternalism, but often it is due to constraints of time and money. The interviews are an attempt to avoid this situation.

Copies of the interview forms and written instructions for the interviewers are included in Appendix D of this report.

Interviewers were chosen by geographic locations, signing skill, and dependability. One interviewer lives and works in Hagerstown; one lives and works in Baltimore; two live in Columbia and work in Baltimore; one lives in Anne Arundel County and works in Baltimore; two live in Prince George's County and work in Washington, D.C.; one lives and works in Prince George's County, and one lives and works in Salisbury. In addition, the project coordinator conducted interviews in Baltimore.

Interviewers reported few problems. Several said that some subjects insisted on filling out the form themselves after the questions were explained by the interviewer. Subjects who did this seemed to understand the questions, and their responses were clear. All of the interview forms returned were useable, and there were few unanswered items.

The 106 subjects interviewed ranged in age from 17 to 73, with a median of 31 years and a mean of 34. The group interviewed is older than the average for all community college students in Maryland, whose mean age is 26. Ten of the subjects live on the eastern shore, 6 live in Western Maryland, and the remaining 90 live in the Baltimore-Washington-Annapolis area.

"Do you think most deaf people want more job training, vocational education, or for community colleges to be more open to deaf people in Maryland?" The vast majority of respondents (94.3%) answered yes to this question. The question was asked to differentiate the respondents' own needs from their perceived needs of deaf people as a group.

"Do you think you might want to go to school to take any kind of courses?" A statement to preface this question was included in the instructions for interviewers, since some people would probably be unfamiliar with the options available at a community college.

93 respondents (87.7%) thought they might want to take courses and 11 (10.3%) were not interested. Two respondents said "maybe". Again, this very large percentage of interested respondents cannot be generalized to the entire deaf population. Interviewers may have tended to choose subjects who were potentially interested in the topic of postsecondary education. Another factor which may have influenced this high degree of interest is the individual attention and explanation afforded by the interview. Normally, a deaf person would not have this advantage in learning about postsecondary education. For example, if a program is established in Maryland, television and radio announcements will not reach deaf people directly. Word-of-mouth is an effective public relations tool for deaf people.

There is no way of knowing how many of these deaf subjects would actually attend a postsecondary program if one were available. However, their expressed desire to take courses in specific subject matter indicates directed interests.

"If yes [i.e. you might want to attend a postsecondary school], what would you take?" The average respondent listed two subjects of interest. Ninety-six percent of the areas of study listed were appropriate for community college level training. A few, such as counseling and social work, require more extended education. The large number of appropriate responses indicate that interviewers were effective in explaining the scope of community colleges' programs.

Almost two-thirds of the areas of interest were in some kind of occupational training or transfer curriculum such as might be offered for a certificate or an Associate of Arts degree. The most frequently listed occupations were clerical, computer-related, mechanic, electronics and skilled craftsman occupations.

Another area of interest was the community-service and credit-free programs usually offered in community colleges. Courses such as art, crafts, tax preparation, TTY repair, and dog grooming were listed as 25.9% of the responses to this question.

"If you are not interested in taking courses, why not?" There were 10 responses to this question. Three people had lost interest in school. Three were trained and satisfied in their work. Three wanted a job immediately, 1 was a shy homemaker, and one failed to see the value of continued education because employers only seem interested in the applicant's experience.

"What services should a hearing college give so that deaf people can go there and be comfortable learning among hearing people?" Of the 99 who responded to this question, 75 respondents listed an interpreter as a necessity of such a program. Forty-six expressed the desire to have teachers who are fluent in sign language, or in some cases, a deaf teacher. Many of these responses noted that an interpreter would be acceptable if a signing teacher were not available.

This particular response is interesting because only two postsecondary programs for deaf students in the United States have a full staff of instructors who are fluent in sign language. These programs are the two national programs, Gallaudet College and the National Technical Institute for the Deaf, the largest programs for deaf students in the world. No existing community college has a staff which is fluent in sign language, and unless a large national "community" college for deaf students would be established, it is doubtful that this model would be feasible.

The lack of confidence among deaf people in dealing with non-signing hearing people relates to a lifelong struggle in communicating with them. Some of the deaf respondents noted the need for the hearing teachers and students' sensitivity to their handicap. One called for "deaf awareness sessions to inform the hearing about deaf people's needs...so they can laugh with the deaf--not at them." Concern about being shunned by hearing students and staff was expressed in several instances. One interviewer stated, "In interviewing the deaf people in the Baltimore area, I found the suggestion of a community college something new to them. The general reaction was, 'With hearing people?!' There was no objection to hearing people. The concern seemed to center around the teacher, with questions such as, could the teacher understand them, would they understand their teacher? Would the teacher have patience, answer questions, find time to explain what they might not understand or ignore them and go on to the next assignment?"

Some deaf people noted that sign language classes and an orientation to deafness for hearing people are important support services when deaf people are integrated into classes with hearing people. Few respondents (4%) mentioned a need for counselors, despite the fact that counselors can help deaf and hearing people adjust to each other.

In designing the support service system for a program for deaf students, these concerns must be taken into careful consideration. A community college which has not adequately informed its hearing staff and students of the needs of deaf people will probably be unsuccessful in attracting deaf students.

Other support services listed by deaf respondents included notetakers, captioned films and other captioned visuals, and tutors.

"Where should a program be located so that most deaf people could benefit?" Of the 97 useable responses, 89 (91%) wanted a program to be located in the respondent's own county or within a short driving distance. Two respondents suggested one program in the Baltimore metropolitan area and one in the D.C. metropolitan area. Two others suggested the middle of the state, and 4 said that the location really did not matter to them.

Summary and Recommendations

There is a need for increased postsecondary educational opportunities for deaf people in Maryland, particularly in vocational-technical education. The need for a program can be explained on the basis of the underemployment of deaf persons, their below-average economic status, and their long denied civil right to equal educational opportunity.

However, need does not necessarily equate with the demand for services. Is there a market for postsecondary education among deaf people? How many people can be expected to attend?

The table on the following page summarizes the population data described in this report.

The population data per se does not reveal much about number of deaf people who would be interested in postsecondary education. However, the deaf caseload of Vocational Rehabilitation is a likely source of potential students. If a postsecondary institution can show that its support services for deaf students are adequate, it appears that VR could refer as many as 50 clients per year. If an agreement can be worked out with Gallaudet and NTID regarding transfer programs, some of Gallaudet's drop-outs may choose a two year program. Young deaf people often find this area attractive because of the large number of deaf peers at Gallaudet, and because of the

Table 5

SOME MEASURES OF MARYLAND'S DEAF POPULATION

Category		Number
Deaf people[1] aged 18-64 years		56,000
Prevocationally deaf people[2] aged 18-64 years		4,200
Recommended number of candidates for Basic Education Programs	over	2,326
1978 projected number of 19-year-olds needing vocational-technical training in Maryland (from 1972 NCDP)		106
Deaf clients of Vocational Rehabilitation, fiscal years 1975 and 1976		1,634
Hard-of-hearing clients of Vocational Rehabilitation, fiscal years 1975 and 1976		1,255
Number of deaf Vocational Rehabilitation (1975-1976) probably seeking training (based on 1972 NCDP Survey)		784
Clients recommended for occupational training by Vocational Rehabilitation counselors working with deaf caseloads, over two years time	over	100
Annual graduates from M.S.S.D. and M.S.D.	Approx.	57

---

[1] Those with significant bilateral loss, including prevocationally deaf.

[2] Those who became deaf before 19 years of age.

socio-cultural benefits offered to deaf people in the D.C. area. High school graduates who need two years of postsecondary education and who want to stay in Maryland will be attracted to an in-state program. Many hard-of-hearing people in the state might be attracted to a college community which is sensitized to the implications of their handicap. In addition, parents of deaf high school aged students support continued education and vocational-technical training for their children.

The high potential for interest in this area does not mean that there would be an enrollment of more than 50 students during the first year of a new community college program for the deaf. Only 12% of the post-secondary programs for deaf students in the United States have enrollments of more than 50 students. Two-thirds of the total programs have been in existence for five years or less (Rawlings and Trybus, 1976). It is probable that as programs establish good reputations, their enrollment grows. However, Maryland's situation indicates the potential for an enrollment of 50 students within several years of the establishment of a quality program. The factors which contribute to the success of post-secondary programs for deaf students will be analyzed in the next phase of the feasibility study.

Like their hearing counterparts, deaf people need different kinds of training depending on individual needs, abilities, and interests.

The Typical Community College Program. Many deaf people can function quite well when integrated with hearing students in a community college setting. Most community colleges serving deaf students use a model in which support services are provided so that students can attend classes with hearing students. The major emphasis in curriculum of most schools is technical-vocational in nature.

Deaf students entering a community college program usually take a special preparation course or combination of courses which are not offered to the hearing students, and which last up to one year.

For the rest of their courses, interpreters are used. Tutoring, notetaking services, vocational development services, personal counseling, vocational placement, and socio-cultural activities are also available in most programs. Manual communication training is usually offered to students and staff of the community college (Rawlings and Trybus, 1976).

Characteristics of successful deaf community college students will be described in the next report, as will admissions criteria of the college serving them. This information will assist in identifying the target population of such a program in Maryland.

Comprehensive Programs. There is an often overlooked, large group of deaf people who cannot compete in an integrated setting for a variety of reasons.

One problem is literacy. Well-known studies in the field of deafness have found that 30% of deaf students 16 years of age or older are functionally illiterate (Mindel and Vernon, 1971, p. 91). These students cannot be brought up to an appropriate reading level by a semester or two of remediation.

Another problem is communication. For example, many VR clients in Baltimore City do not have adequate manual communication skills to communicate even with those who do know sign language. Such people would be lost in a typical community college program for deaf students.

A third problem relates to socialization in a broad sense. These deaf individuals may be socially isolated and immature. They are often uninformed about the world of work, career options, how to fill out an application, the importance of attendance, punctuality, and cooperation on a job. It must be emphasized that by and large these individuals are not mentally retarded. Often their problems result from poor education and an imposed lifelong lack of communication with the people around them.

This group of deaf people is difficult to serve, and consequently there are few programs which make the effort. They need self-contained classes taught by teachers who are very skilled in manual communication and who have experience in teaching deaf people. Vocational training should not be of a very technical nature, and independent living skills should be an integral part of the curriculum. In-depth evaluation and work adjustment training must be available. Some students will need a residential facility for the duration of their training. An on-the-job training program would be an essential component of postsecondary education for these people.

This type of program, described by Schein and Delk (1974) as a "comprehensive" postsecondary treatment, is the type of program which might be located at the Maryland Rehabilitation Center in Baltimore. MRC serves a wide variety of handicapped people, but instruction is over the head of deaf adults with poor educational backgrounds. Many of the vocational offerings at MRC have reading level requirements which prove prohibitive to those truly in need of comprehensive training. Deaf clients can only choose between food service and janitorial training and the duration of training is usually limited to about three months. In many instances, interpreters are not provided in the classrooms.

A new personal adjustment training program functioning in cooperation with MRC is being administered by the Baltimore League for Crippled Children and Adults. This is a promising beginning in providing truly comprehensive services to those who need them. However, there is much work left to be done in this facet of postsecondary education for deaf people.

Adult Basic Education. Because of the important role that reading plays in everyday life, a low reading level can affect the deaf person throughout adulthood. There is a need for multi-level Adult Basic Education for deaf people throughout the state.

According to the National Census of the Deaf Population (Schein and Delk, 1974), 53% of deaf people left school before the twelfth grade. These people are likely consumers for Adult Basic Education or General Education Development programs. Applying this proportion to the census data for Maryland, there are at least 2,326 prevocationally deaf people 18 to 64 years of age who could benefit from A.B.E. or G.E.D.

Even more important than years of education is the achievement level of deaf people. Large numbers of deaf people who have completed 12 or 13 years of education have lower verbal and mathematical skills than that of the general population. Like the hearing population who need A.B.E. or G.E.D., these deaf people do not necessarily want it. However, the previously mentioned needs assessment of deaf adults in Baltimore City placed A.B.E. at third priority for continuing education. (First priority was reduction in unemployment, and second was improved communication and interaction between deaf and hearing persons.) Such a high priority for adult education indicates that the deaf community recognizes its importance.

Class size for deaf students in A.B.E. or G.E.D. programs should be much smaller than for hearing adults, and it is important that the teacher of these programs for the deaf be trained and experienced teachers of deaf people. Problems in learning and methods used in teaching English to deaf people are so unique that the use of an interpreter is an inappropriate way to meet this need. The Center for Continuing Education at Gallaudet College has developed materials for use in these classes and will provide expert assistance free of charge to agencies willing to establish A.B.E. and G.E.D. classes for deaf people.

Community Services. The state of Maryland is very fortunate to have in its community colleges community services programs which strive to serve deaf people. Many colleges offer interpreting services in credit-free courses attended by deaf people. Sign language classes and some limited interpreter training are offered at many locations. Several deaf awareness conferences have also been sponsored by community service departments. Almost without exception, community service personnel have been responsive to requests and suggestions from professionals in the field of deafness.

Deaf people and professionals who serve them should take advantage of this resource as a means of educating the public as well as educating deaf people.

Locations. Many factors must be considered before final recommendations are made regarding the location of a postsecondary program for deaf students. For example, interest on the part of the community college to be recommended is a necessity. An analysis of the community resources outside the college may have an effect on which site is most desirable. Finally, existing community college programs across the nation may have some worthwhile advice on the selection of the college or colleges which will serve deaf people.

Therefore, the recommendations stated here are preliminary ones, based on the Manpower Analysis Report and this Needs Assessment. They may be changed as other factors are considered.

Based on information collected to date, it is recommended that the location for a community college program be near the D.C. metro area, to best serve the most deaf people needing this kind of service. The college should ideally have a wide range of occupational training offerings, as well as a transfer program.

A well organized comprehensive postsecondary educational program should be located in the Baltimore metropolitan area, to best meet the needs of deaf people in that area.

Adult Basic Education, General Education Development, and Community Service activities for deaf people should be located at all community colleges. These institutions must continue to make an effort to meet the needs of local deaf residents.

REFERENCES

Frisina, D.R., Brady, J., and Brill, R. Report of Ad Hoc committee on definitions of deaf and hard-of-hearing. American Annals of the Deaf, 1975, 120, 509-514.

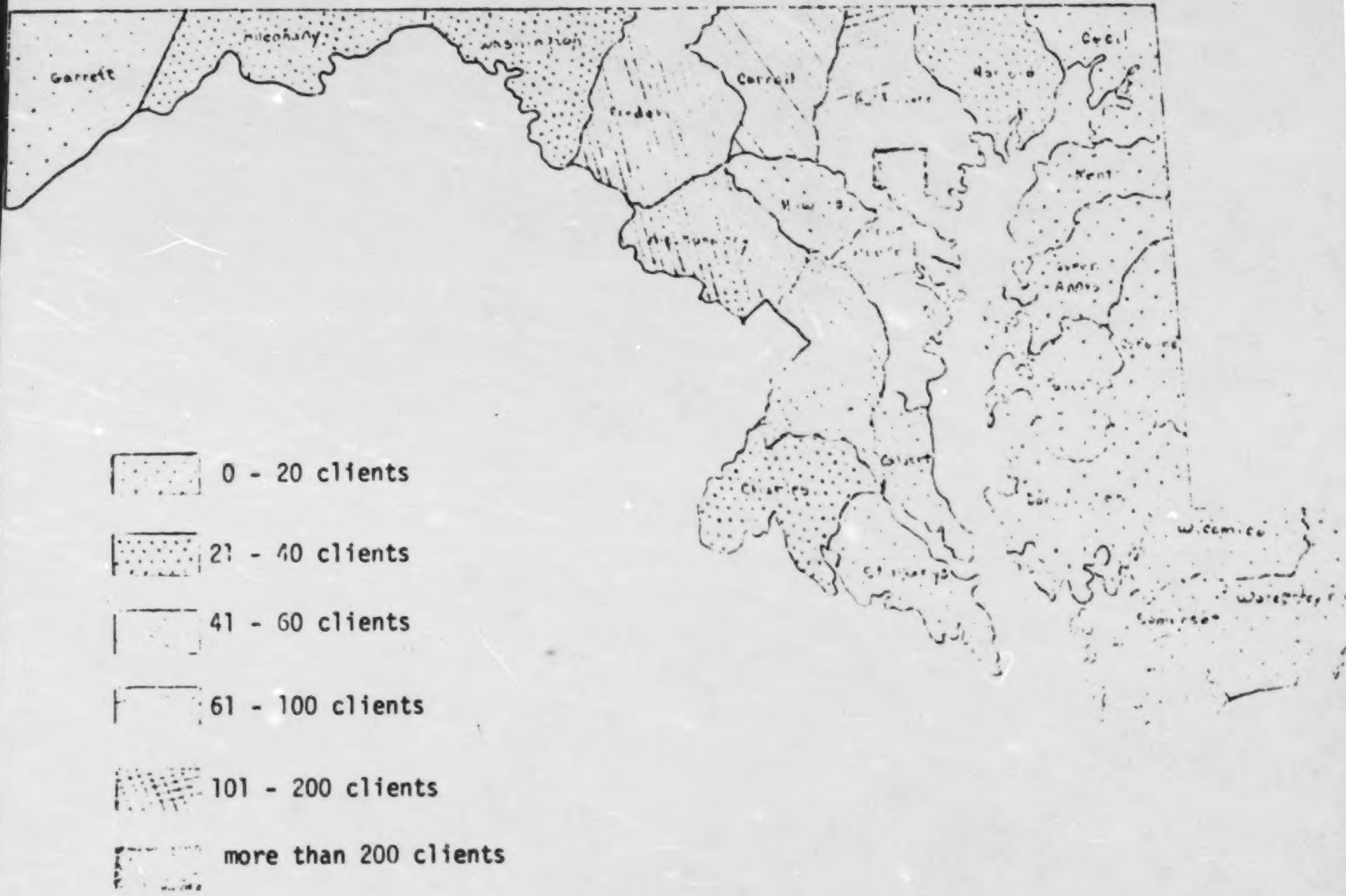
Rawlings, B.W. and Trybus, R.J. Update on postsecondary programs for hearing impaired students. American Annals of the Deaf, 1976, 121, 541-546.

Schein, J.D. and Delk, M.T. The Deaf Population of the United States. Silver Spring, MD: National Association of the Deaf, 1974.

Mindel, E. and Vernon, M. They Grow in Silence. Silver Spring, MD: National Association of the Deaf, 1971.

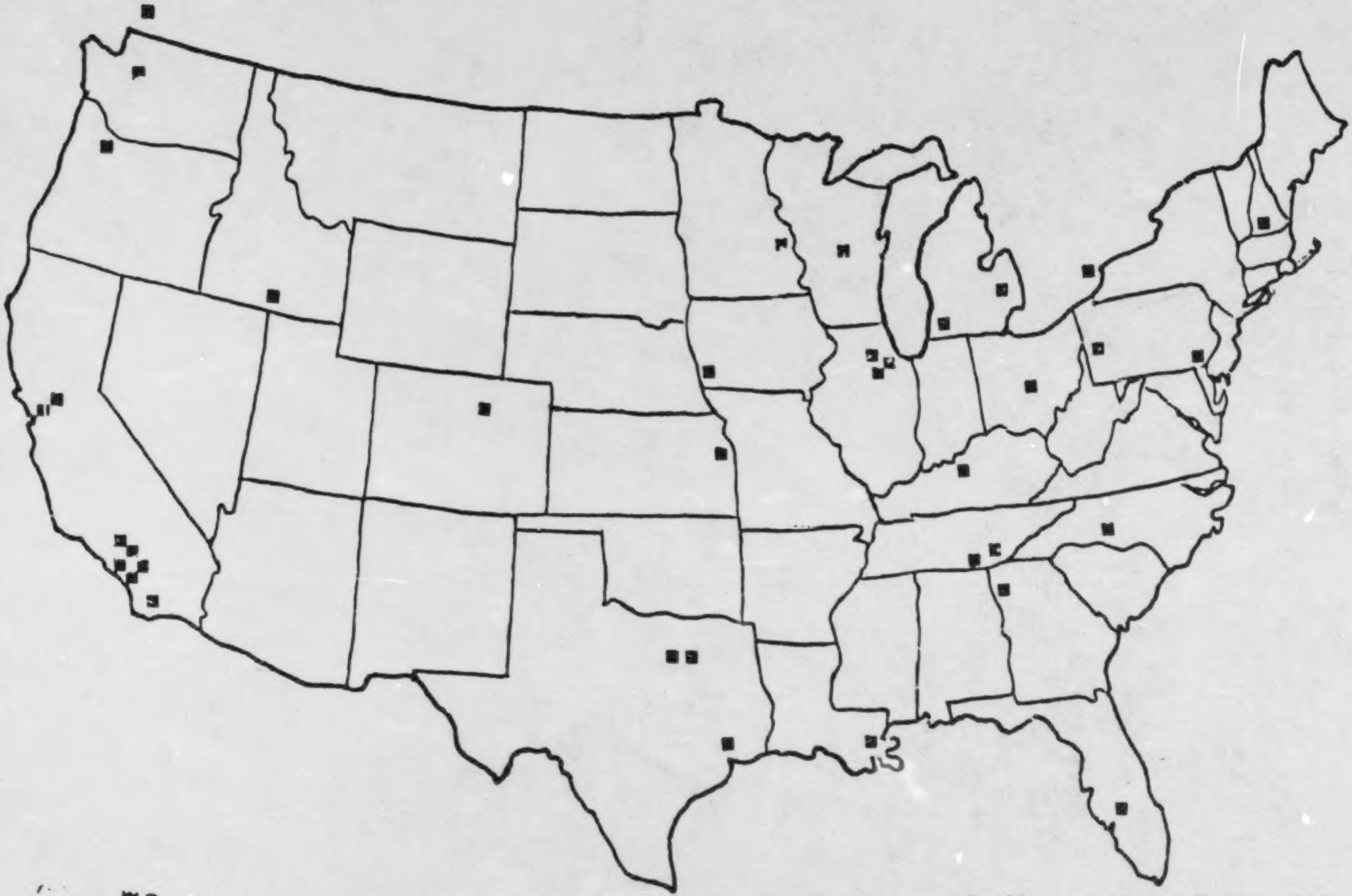
APPENDIX A

Geographic Distribution of Vocational Rehabilitation's Deaf Clients in Maryland, 1975-1976


Garrett
Allegany
Washington
Frederick
Carroll
Baltimore
Harford
Cecil
Kent
Howard
Montgomery
Queen Anne's
Calvert
Charles
St. Mary's
Wicomico
Worcester
Somerset
0 - 20 clients
21 - 40 clients
41 - 60 clients
61 - 100 clients
101 - 200 clients
more than 200 clients

APPENDIX B

Geographic Distribution of Community College and Vocational Center Programs for Deaf Students



Rawlings, B.W. and Trybus, R.J., 1976

APPENDIX B (Cont'd.)

Community College Level Postsecondary Programs by State

California

El Camino College
Torrance, California

Golden West College
Huntingdon Beach, California

Los Angeles Pierce College
Woodland Hills, California

Ohlone College
Fremont, California

Pasadena City College
Pasadena, California

Riverside City College
Riverside, California

San Diego Community College
San Diego, California

Valley Vocational Adult School
Industry, California

Colorado

Community College of Denver
Denver, Colorado

Florida

St. Petersburg Junior College
Clearwater, Florida

Georgia

Floyd Junior College
Rome, Georgia

Idaho

College of Southern Idaho
Twin Falls, Idaho

Illinois

Northern Illinois University
DeKalb, Illinois

Waubonsee Community College
Sugar Grove, Illinois

William Rainey Harper College
Palatine, Illinois

Iowa

Iowa Western Community College
Council Bluffs, Iowa

Kansas

Johnson County Community College
Overland Park, Kansas

Kentucky

Jefferson State Vocational-Technical School
Jeffersontown, Kentucky

Louisiana

Delgado Junior College
New Orleans, Louisiana

Michigan

Charles Steward Mott Community College
Flint, Michigan

State Technical Institute and Rehabilitation Center
Plainwell, Michigan

Minnesota

St. Paul Technical-Vocational Institute
St. Paul, Minnesota

New Hampshire

New Hampshire Vocational
Technical College
Claremont, New Hampshire

North Carolina

Central Piedmont Community
College
Charlotte, North Carolina

Ohio

Columbus Technical Institute
Columbus, Ohio

Oregon

Portland Community College
Portland, Oregon

Pennsylvania

Community College of Allegheny County
Monroeville, Pennsylvania

Community College of Philadelphia
Philadelphia, Pennsylvania

Tennessee

Chattanooga State Technical Community
College
Chattanooga, Tennessee

Texas

Eastfield College
Mesquite, Texas

Lee College
Baytown, Texas

Tarrant County Junior College District
Fort Worth, Texas

Washington

Seattle Community College
Seattle, Washington

Wisconsin

North Central Technical Institute
Wausau, Wisconsin

Canada

George Brown College of Applied
Arts and Technology
Toronto, Ontario, Canada

Vancouver Community College
Vancouver, British Columbia, Canada

APPENDIX C

Questionnaire Materials, Maryland School for the Deaf

Parent Survey

MARYLAND SCHOOL FOR THE DEAF

Frederick, Maryland 21701

DAVID M. DENTON, Ph.D.
Superintendent

November 5, 1976

Dear Parent:

We need your opinion on some matters which may be very important to your child's future. Howard Community College is conducting a study of the needs of deaf people for education after graduation from a high school program. Right now, college and job training programs for deaf people are extremely limited in Maryland. Before we can develop services for deaf students, we must find out what their needs are.

Within a week, you will receive a short questionnaire and a stamped envelope addressed to Mr. Shellem at the Maryland School for the Deaf. The questionnaire asks you to give your opinions on various topics related to your child's education after he or she graduates from M.S.D. It does not ask your name or your child's name.

Please fill out the questionnaire and mail it before November 21, 1976. Thank you very much for helping with this study.

Sincerely,

Judy Athey

Judy Athey
Project Coordinator

David M. Denton
Superintendent

DMD/JA:eec

MARYLAND SCHOOL FOR THE DEAF
Frederick, Maryland 21701

DAVID M. DENTON, Ph.D.
Superintendent

November 10, 1976

Dear Parent,

This brief questionnaire asks you for some of your opinions on your child's need for education after he or she graduates from Maryland School for the Deaf. It will help us plan college and job training programs which meet the needs of deaf people.

The first part asks some general information. Please answer every question. In the second part, check the answer or answers which are most like your opinion. We welcome any additional comments you may have.

When you have completed the questions, please mail the questionnaire before November 21, 1976 in the stamped, addressed envelope provided for your convenience.

All information will remain strictly confidential; please note that we are not asking your name.

Thank you very much for your help.

Sincerely,

Judy Athey

Judy Athey
Project Coordinator
Howard Community College

David M. Denton
Superintendent

DMD/JA:eec

Enclosures

Part I

A. How old is your deaf child? ____________

B. In which county (or Baltimore City) do you live? ____________________

C. Are you deaf? ____________ Are you hard-of-hearing? ________________

Part II

Check the response wchich is most similar to your opinion.

A. Do you think your child should receive more education after graduation from high school?

_____ Yes

_____ No

_____ No Opinion

B. In your opinion, what kind of education should your child receive?

_____ Basic Education (language, reading, math, etc.)

_____ Job training (vocational-technical)

_____ 4 year college (Bachelor's degree)

_____ 2 year college (Associate of Arts degree)

_____ How to live on his/her own (independent living skills)

_____ Other: (Please list) ________________________________

C. If you had a choice of colleges or vocational schools, where would you want your child to attend? Please write the name of your first, second, and third choices of colleges and/or vocational schools.

First Choice: ________________________________

Second Choice: ________________________________

Third Choice: ________________________________

D. What kind of job would you like to see your child choose for a career?

____

E. What kind of job would your child like to choose for a career?

____

F. Has your child shown any interest in continuing his/her education after graduating from MSD?

_____Yes

_____No

_____Don't Know

_____Child is Undecided

_____Other (Please explain): ________________________

OTHER COMMENTS: ____

____

____

____

APPENDIX D

Interview Materials for Interviews with Deaf People

November 17, 1976

Dear

Enclosed are the interviewing materials which I described to you previously: 1) notes for interviewers, and 2) copies of the interview form. Please read both carefully and please call me before you begin to interview people. I need to be sure that you are clear about what to do.

Thank you very much for your willingness to help. We hope that this survey will help alleviate the common problem of deaf people not being asked their opinions on matters important to them. You are performing a vital service.

Please return ten completed forms to me by December 20. At that time I will send you a form to sign so that you can be paid for your services.

Thank you again.

Sincerely,

Judy Athey, Project Coordinator
Feasibility Study of Postsecondary Programs
for Deaf Students

JA/va

howard community college

Columbia, Maryland 21044
1-301-230-8000
992-4830

FEASIBILITY STUDY OF POSTSECONDARY EDUCATION FOR DEAF STUDENTS

Notes for Interviewers

As an interviewer, you are very important to this study. Please read these suggestions carefully, and if you have any questions, please call me at the above phone number. Thank you very much for helping.

1. Choosing deaf people to be interviewed:

Because there is no registry of deaf people in Maryland, there is no way to get a truly random sample. Also, since we do not have information on the reading and math achievement levels of all deaf people, we cannot choose our subjects according to this variable. Therefore, it is up to the interviewer to attempt to balance the group of people interviewed.

Age: Interview people age 16 and older, and try to get a variety of ages.

Education: Do not interview more than one Gallaudet graduate out of your ten subjects. A large number of graduates would make it seem that the deaf population in Maryland has had much more education than is really the case. Interview people of various educational levels.

Occupation: Try to interview people of various occupations and some unemployed people.

Location: Within your geographic area, try to get some people from different parts of your county or large city.

Sex: Try to get a reasonable balance of males and females.

Personality: Do not interview only outgoing people; try to get some people who do not usually speak out.

Of course, you will not be able to meet all of these, but do your best to get a representative group.

2. Introduction

Before beginning the actual interview, explain that you are helping with a study that wants to find out deaf people's feelings about getting more education after graduating from high school. Let the person know that many deaf people throughout Maryland will be interviewed.

3. Using the Interview Form:

Please write clearly and be sure that your phrases would be understood by another person reading them. If you have any comments about the interview, please write them on the back. For example, if it was clear to you that the subject did not understand the questions, you would indicate this on the back.

4. Potential Problems in Interviewing:

Question #1 (Do you think most deaf people want more job training, vocational education, or for community colleges to be more open to deaf people in Maryland?): Find out the person's opinion on each issue separately, because his or her feelings may be different for each. For example, the person may feel that more job training is necessary but community college services are not necessary. Therefore, ask about job training, then vocational education, and then community colleges.

Question #2 (Do you think you might want to go to school to take any kind of courses?): When giving the interview, you may or may not find that the person does not know what options could be open to him or her in a community college or vocational center. People who have been denied access to postsecondary education may have no way of knowing whether they would want it.

If this happens, explain what is meant by postsecondary. Be careful not to be selling the idea. Sometimes subjects will give an answer just because they think it will please you. If an answer is suspect, ask the person why they want to take that subject. It is very important that you give only facts, not your own opinion.

Using the subject's preferred means of communication, you could explain the following to him or her:

> After finishing high school, after graduating, many hearing people go to college. Some go for four years, some for two years, some for a short training course. There are many kinds of schools and many ways for hearing people to get training. Some hearing people want to learn more so that they can try to get a better job, or more pay. Right now, if a deaf person wants to go to college, he or she can't. The deaf person is stuck.
>
> Suppose this changes, and in the future, colleges have interpreters, couselors for deaf people, notetakers, and other services. Do you think you might want to go to college or to a vocational center to take courses?

More or less explanation will be necessary, depending on each person.

When asking what courses the person would like to take, try to get as specific an answer as possible. For example, if the response is "job training", ask "For what job?" If the response is "Business", probe to find out the specific occupation that the person has in mind. "Business" could be anything from a typist to a bank president.

HOWARD COMMUNITY COLLEGE - FEASIBILITY STUDY OF POSTSECONDARY EDUCATION FOR DEAF STUDENTS

NAME ______________________________

AGE ________

CITY OR COUNTY OF RESIDENCE ______________________________

1. Do you think most deaf people want more job training, vocational education, or for community colleges to be more open to deaf people in Maryland?

2. (Preface this question with explanation of options available) Do you think you might want to go to school to take any kind of courses?

   a. If yes, what would you take? (Try to find all areas of interest)

   b. If no, why don't you want this type of program yourself?

3. What services should a hearing college give so that deaf people could go there and be comfortable learning among hearing people?

4. Where should a program be located so that most deaf people could benefit?

____
Interviewer's Name

____
Date

APPENDIX E

Postsecondary Programs for Deaf Students - Feasibility Study

Advisory Committee

Mrs. Ruth Brown, Staff Specialist
Maryland State Dept. of Education
Division of Vocational Education

Mr. Frank Bryan, Principal
Maryland School for the Deaf
Columbia Campus

Ms. Norma Buemi, Vocational
Rehabilitation Counselor
Division of Vocational Rehabilitation

Mrs. James Clark, Jr.
Parent and Community Member

Mr. Edward E. Corbett, Jr.
Asst. Superintendent
Maryland School for the Deaf

Dr. David M. Denton, Superintendent
Maryland School for the Deaf

Mr. Joseph P. DeSantis
Staff Specialist in Vocational-Technical
Education
Maryland State Dept. of Education

Mr. Ron G. Frank
Director of Community Education
Gallaudet College

Ms. Gertrude Galloway, Vice Principal
Maryland School for the Deaf
Columbia Campus

Mrs. Bernice Hoeper, Director
Deaf Community Services
Lutheran Mission Society of Md.

Mr. Edward T. Kilcullen, Consultant
in Services to the Deaf
Maryland State Dept. of Education
Division of Vocational Rehabilitation

Dr. Leonard Siger
Research Associate
Baltimore City Dept. of Education

Mr. James S. Smith
Associate Dean of Instruction
Howard Community College

Mrs. Jackie Stover, Liaison Worker
Baltimore City Public Schools

Dr. McCay Vernon, Professor
Western Maryland College

Ms. Judith R. Williamson
Extension Agent
University of Maryland

Ms. Anne Marie Zalewski,
Faculty Member
Howard Community College

APPENDIX F

Definitions

The Conference of Executives of American Schools for the Deaf, an organization of directors of schools and programs for the deaf, has developed definitions of the following terms:

Hearing Impairement. A generic term indicating a hearing disability which may range in severity from mild to profound: it includes the subsets of deaf and hard of hearing.

A deaf person is one whose hearing disability precludes successful processing of linguistic information through audition, with or without a hearing aid.

A hard of hearing person is one who, generally with the use of a hearing aid, has residual hearing sufficient to enable successful processing of linguistic information through audition.

Appendix B
of
Final Report

Report 2: Implications of Manpower Research in Postsecondary Education for Deaf People in Maryland

IMPLICATIONS OF MANPOWER RESEARCH IN POSTSECONDARY EDUCATION FOR DEAF STUDENTS IN MARYLAND

The Need

Before recommending an appropriate site for a postsecondary program for deaf students, some general information on manpower needs must be analyzed. Based on demand projections and the deaf person's capabilities, certain occupational training areas can be recommended as having good post-graduation employment potential. Selection of an institution or institutions to serve deaf individuals will depend in part on the occupational training offerings of the institution(s) in question. Deaf people will be best served by those community colleges which offer the most programs having good employment prognoses.

If not used properly, recommendations of training areas could ultimately serve to limit opportunities for deaf people. It is very important that this danger be recognized and avoided by the postsecondary institution serving deaf students. The purpose of this analysis is merely to help prevent program failure which might result from the selection of an inappropriate setting for a program. It is not intended as a guide to the occupations deaf people can master, as these are virtually limitless.

The site for a program for deaf students should offer a variety of occupational training programs, so that the individual will not be stereotyped in a few programs.

Objectives

The objectives of this report are:

1. To describe the job market as faced by the deaf person, the limitations it places on him or her, and its implications for selection of a career.
2. To list state and national manpower projections for the 1980's.
3. To list occupations which require training of two years' duration or less, and which are not dependent upon hearing.
4. To report vocational rehabilitation counselors' opinions on desirable occupational training subjects for deaf clients.
5. To synthesize the above information and make recommendations concerning curricular offerings of postsecondary programs for deaf students based on the information.

Deafness and the Job Market

The deaf job seeker faces more barriers to employment than does the hearing job seeker. These barriers, which will affect the employment potential of postsecondary students, must be considered in designing a program for them.

Negative employer attitude is a major barrier to the deaf person's search for a job. Part of employers' resistance may be due to a lack of knowledge of the handicap of deafness and its implications. Some employers may simply not want to be bothered, even if they are aware of the handicap. Still others feel psychologically threatened by people with physical disabilities. They may reject a person with whom they feel awkward due to communication difficulties.

Some manifestations of negative attitudes take the form of reasons given by the employer for denying employment to the deaf applicant. One such reason is the employer's insistence that insurance rates will rise, or that the firm's insurance may be cancelled if a deaf person is hired. Deaf employees have better safety records than the average for hearing employees (Williams, 1970), but insurance companies may in fact threaten to charge higher rates for employers of deaf or other disabled people. If this is the case, the practices of the insurance company should be changed. It is possible, on the other hand, that employers use this excuse because they know it is a difficult point to dispute. In either case, there is need for attitudinal change before deaf people will be equitably considered for "hazardous" occupations.

Another reason given for not hiring deaf workers is that the ability to hear is essential for the position in question. The importance of hearing tends to be viewed out of proportion to its real relation to the task at hand. An illustration is the tendency of the person who is unfamiliar with deafness to ask, "Can deaf people drive?" Unfortunately, few deaf people and vocational rehabilitation counselors have a sufficient knowledge of the tasks performed in various jobs to debate their relationship to a client's hearing loss. This particular attitude has long-term effects on deaf people who are hired, since they are less likely to be promoted than their hearing co-workers (Silver, 1970). Employers are reluctant to place a person with a communication handicap in a supervisory role. There is a need for task analyses of the wide variety of jobs on the market, so that employers can be challenged as to the job-relatedness of a normal hearing requirement.

Written tests. Deafness is not only an auditory handicap, but a language and communication handicap as well. Reading levels of deaf people are lower than those of the general population, despite a normal intelligence distribution.

For this reason, it is common for a bright deaf person who has mastered the skills of an occupation to be barred from employment because of a low score on a written examination. One ramification of the problem is that deaf people often have difficulty in acquiring licenses or union membership when a written test is required.

Affirmative action laws require that those businesses and agencies contracting with the federal government screen employees only for job related traits. For example, women could be denied employment as attendants in men's rest rooms, and profoundly deaf people could be denied employment as piano tuners, because they do not have the job-related requirements for these positions. Much litigation in the next several years will undoubtedly focus on this issue of job-relatedness, and certain written examinations may be altered or eliminated as a result. However, until this happens, many deaf people could conceivably train for an occupation and then be unemployable.

Therefore, the written testing requirements of occupations must be considered when counseling deaf clients regarding their career choices.

Apprenticeship. In the State of Maryland, competition for apprenticeships is very keen. There are currently 3,800 registered apprentices in Maryland, and there is a long waiting list. Pre-apprenticeship screening involves the administration of some sections of the GATB (General Aptitude Test Battery) and students who score below a sixth grade reading level are counseled that they may have difficulty in passing the written test requirements prior to granting a license. This reading level requirement would be prohibitive to many deaf people who are otherwise well suited to the trade in question.

Labor Supply. The manpower demand which will be described in this report is only part of the manpower market. Manpower supply also affects the degree of competition for jobs. Unfortunately, supply is a very complex variable to measure, involving such factors as mobility, mortality, availability of training programs, and career change. Since the Bureau of Labor Statistics, Department of Labor is just beginning its effort to measure supply, information is not available at the present time.

However, some assumptions will be made based on studies of employers' practices and attitudes. In general, deaf people are at a disadvantage in a competitive job market, and as a consequence, should be at least as well trained as hearing people when applying for a position or promotion (Klein, 1970).

Rectifying the Situation. Enforcement of affirmative action legislation requires litigation, a long and expensive process. Handicapped people have a long way to go before achieving the status of an organized minority. Their numbers are small; the recognition of their rights is a recent occurrence, and they are an extremely diverse population, with the needs of one group of handicapped citizens sometimes conflicting with the needs of another group.

These factors interact to cause slow improvement in the status of the rights of handicapped people. Consequently, the implications of all forms of job discrimination may be viewed as an unfortunate reality for the near future, and postsecondary programs for deaf students must be designed accordingly.

Underemployment. Professionals in the field of deafness often speak and write about deaf people being employed in jobs below their abilities. Is underemployment really a problem?

The following chart illustrates the employment of deaf persons. Percentages for the deaf population, taken from the 1972 National Census of the Deaf Population (Schein and Delk, 1972, p. 84) describe the deaf work force in the southern United States. The large numbers of deaf people employed professionally by Gallaudet College and the Maryland Schools for the Deaf may inflate the percentage of those employed professionally (9.0%). This figure is probably an overestimate of the professionals in general deaf population. The percentages for the general population are derived from the Bureau of Labor Statistics estimates of numbers employed in the overall work force of the United States, by occupational category.

Table I

Employment of General Population vs Employment of Deaf Population

Occupation	Percent of general work force employed in this occupational category	Percent of deaf work force employed in this occupational category
Professional and technical	14.3	9.0
Managerial and administration	10.4	1.9
Sales	6.3	.3
Clerical	17.5	19.6
Craftsmen	13.4	22.0
Operatives, transit and non-transit	16.2	32.2
Laborers, non-farm	5.1	6.8
Farm workers	3.6	2.1
Service workers	13.3	6.0

The table shows that deaf people are under-represented in professional, technical, managerial, administrative, sales, and service occupations. They are extremely over-represented in craftsmen and operatives occupations. It is not known whether these differences are due to placement in jobs below deaf people's training and capabilities. An inadequately trained population of deaf workers could account for some of the imbalance.

National and State Manpower Projections, 1974-1985

National Trends in Manpower Demand. Information on national trends in manpower demand is available in the 1976-1977 Occupational Outlook Handbook, a publication of the Department of Labor, Bureau of Labor Statistics.

At present, approximately one-third of the labor force is devoted to production work, and two-thirds are employed in service producing industries, such as education, health care, trade, repair and maintenance, government, transportation, banking, insurance and utilities.

Such service occupations will grow at a rapid rate into the 1980's, whereas production will grow at a slower rate. Growth in white collar occupations will outpace that of blue collar occupations. The number of openings in agriculture will decline. The occupations of salesworkers, operators, and laborers will experience slow growth; openings for crafts workers, managers, and professional workers will grow at an average rate; and clerical and computer workers will grow at the fastest rate. Rate of growth is not the only demand factor to be considered, however. Large occupations with slow growth rates may offer more openings than fast growing small ones. Thus, size of the labor force in each occupation must be considered.

In general, jobs will become more complex and the variety of jobs being done will be greater. Consequently, the training needs of the work force will increase. The Occupational Outlook Handbook states, "Getting as much education and training as one's abilities and circumstances permit should therefore be a top priority of today's youth" (DOL, 1975, p. 16).

State Trends in Manpower Demand. State manpower projections for 1974-1985 are available from the Research and Analysis Division of the Maryland Department of Human Resources. Projection procedures used were developed by the Bureau of Labor Statistics, United States Department of Labor.

Although there will be a shift toward employment in non-manufacturing industries, industrial trends for Maryland indicate no major changes in the eleven industry division (manufacturing of durable goods; manufacturing of non-durable goods; agriculture; forestry and fisheries; mining; construction; transportation and other public utilities; wholesale trade; retail trade; finance, insurance and real estate; services; and government). An analysis of the growth of occupations by percentage shows the following occupations as the fastest growing:

Table II

Ten Fastest Growing Occupations by Percentage (1974-1985) Projection

Occupational Category	Projected 1974-1985 Employment Growth by Percent
Health Technologists and Technicians	73.18
Health Service Workers	68.52
Computer Specialists	65.33
Technicians, excluding health	59.41
Mathematical Specialists	55.83
Cleaning Service Workers	47.71
Stenographers, typists, secretaries	47.44
Buyers, sales, loan managers	41.49
Social Scientists	41.14

However, as mentioned previously, size of the labor force in each category is a crucial variable. Growth in terms of projected numbers of job openings for the 1974-1985 period is very different and is probably a more relevant measure for the purposes of this report. The following table lists the twenty five occupations having the largest additional numbers of openings between 1974 and 1985.

Table 3

Twenty Five Occupations with Greatest Projected Growth by Numbers of Job Openings (1974 - 1985)

Occupational Category *	Projected 1974-1985 Employment Growth. Number of New Openings.
All other clerical workers	70,650
Stenographers, typists, secretaries	44,600
Sales workers	31,200
All other managers, officials, proprietors	27,000
Construction crafts workers	26,850
All other professional, technical	23,750
Health service workers	18,500
Medical workers, excluding technicians	18,200
Food service workers	18,050
Cleaning Service workers	16,550
Mechanics, repairers, installers	16,100
Buyers, sales, loan managers	12,450
Personal service workers	9,900
Operatives, excluding transportation	9,500
Writers, artists, entertainers	8,700
Laborers, except farm	8,650
Engineering and science technicians	7,700
Teachers	7,650
Protective service workers	7,600
Administrators, public inspectors	6,950
Computer specialists	6,950
Engineers, technical	6,350
Transportation equipment operatives	5,900
All other operatives, excluding transportation	5,600
Health technologies and technicians	5,350

* Occupations which are included in each category are listed in appendix B

Appropriate Occupations: An Analysis

The Occupational Outlook Handbook describes more than 850 occupations with regard to (1) the nature of the work, (2) places of employment,

(3) training, other qualifications, and advancement, (4) the employment outlook, (5) earnings, and (6) working conditions. Occupations described in the Occupational Outlook Handbook cover about 95% of all salesworkers, 90% of all professional, craft, and service workers, 80% of clerical workers, 50% of all operatives, and less than 50% of managerial workers and laborers. Of the last two groups, laborers do not require postsecondary education. Therefore, for the purposes of this report, only some operatives and managerial occupations are under-represented in the Occupational Outlook Handbook.

In making the initial determination as to each occupation's suitability for consideration as areas for postsecondary training, several criteria were used. First, if no training is required for employment, that occupation was eliminated. In these occupations, employers use short term on-the-job training where necessary.

Second, if the training required for an occupation exceeds the scope of the vocational center or community college, that occupation was eliminated. Because there are excellent national programs for deaf students who wish to take liberal arts or high level technical training, the focus of this analysis will be training of less than four years.

Third, if an occupation is heavily dependent upon hearing, it was eliminated. This is a very difficult judgment to make; deaf people are engaged in all kinds of employment, and some could function in these occupations. For example, where extensive use of the telephone is necessary, an assertive deaf person could negotiate for a secretary who would interpret telephone conversations to him/her. However, a deaf person trained in a field which depends heavily on the use of the phone (such as bill collection) would face a very resistant job market. Chances of employment would be greatly diminished by employer attitude.

Few occupations were eliminated because of the handicap. Examples of these occupations include piano tuners, stenographers, receptionists, and insurance claim representatives. It must be reiterated that no occupation can be automatically ruled out simply because a person has a hearing impairment. However, training priorities must be set for postsecondary programs that will result in a high probability of employment for deaf graduates.

The fourth criterion leading to elimination of an occupation is whether the industry currently practices discrimination by law. For example, truck driving is a viable occupation for deaf people, but at present requirements for this occupation exclude the deaf person solely on the bases of hearing loss. In general, occupations in law enforcement and in the armed forces are closed to deaf individuals on a similar grounds. Until these rules are changed, there is little logic in preparing the deaf applicants to enter these occupations.

Finally, job availability information influenced the elimination of some occupations. If competition would be keen in an occupation, employing a small workforce, that occupation was removed from the priority occupation list.

The groups of occupations below are described in depth in the

Occupational Outlook Handbook to which the reader is referred for more detailed information. Also, Appendix C of this paper lists occupations which were not eliminated by the criteria cited above and not excluded based on these five criteria.

Office Occupations included clerks, bookkeepers, office machine operators, secretaries, statistical clerks, computer keypunchers, and computer operations workers. According to the Occupational Outlook Handbook, employers are increasingly insisting on a BA dgreee for computer programmers.

An appropriate Banking Occupation was that of bank clerk. The others listed required no training (teller) or four years of training (manager trainee).

Insurance Occupations were cited as requiring the BA, with the exception of claim representatives. Because of the heavy use of the phone and necessity for public contact this occupation was not recommended. However, the insurance industry does employ a large number of clerks, secretaries, and other office workers.

Administrative and related occupations were listed as requiring at least a bachelor's degree in almost all cases. However, some advertising workers and some accountants could be exceptions to this trend. Because there is a great need for training of deaf people in mid-level management because of the underemployment problem, some general managerial or administrative training should be available for those workers with sufficient experience but insufficient training to move up.

Most of the general services occupations do not require training.

In protective and related service occupations (police and security), the deaf person would probably face a resistant employer, since police, FBI agents, and firefighters have stringent physical requirements which usually include normal hearing.

Education Occupations listed required advanced education, with the exception of library assistant. (However, teacher aides and tutors were not mentioned, and these are possible occupational training opportunities).

Most sales occupations required only on the job training by employers rather than two-year occupational training. A possible exception is the occupation of auto service advisor, which requires training and experience.

Many construction occupations are ideally learned via apprenticeships, and some others, such as laborers, do not require occupational training. Although there is not a large number of apprenticeships in Maryland, there are other opportunities for those who wish to train for many of these areas. Community colleges and vocational centers offer a variety of construction trades in their occupational training curriculum. Construction trades listed in the Occupational Outlook Handbook include bricklayers, stonemasons, carpenters, cement masons, construction electricians, elevator mechanics, glaziers, lathers, joiners, paperhangers, plasterers, roofers, sheet metal workers, and ironworkers.

Transportation occupations present a variety of problems. Air transportation workers such as air traffic controllers and pilots need good hearing. Many other transportation occupations are found in industries with poor prospects, such as merchant shipping and railroad employment. Driving occupations require no training or may be barred due to interstate regulations.

Forestry occupations require bachelor's degrees, with the exception of forestry technicians.

Under the heading of Other Scientific and Technical Occupations, there were a large number of occupations which require training appropriate for a two year program to provide, which have good employment prospects, and which do not depend upon hearing ability. The list is quite long and varied but some examples are electronic technician, meterological technician, and surveyor.

Mechanics and repairers do a variety of jobs which require training, but not hearing. Examples include watch-jewelry repairing, automobile mechanics, and air conditioning, refrigeration, and heating repairers.

A fast growing field of employment is that of health occupations. Paraprofessional occupations can be taught at two year institutions. Among the job titles included are dental assistant, electro-encephalographic technician, and medical lab worker.

Professional fields in science, counseling and rehabilitation require four years or more of education, but many of these professions are now looking to paraprofessional assistants to perform more routine duties.

Finally, design industries have a limited number of occupations which do not require four years of training. Competition is becoming keener as more four year college graduates enter this area. Photography, a high interest training area for many deaf students, is becoming increasingly competitive.

The Perspective of the Vocational Rehabilitation Counselor

Vocational rehabilitation counselors who serve a primarily deaf caseload have learned from hard experience the problems encountered in placing their clients. They have talked with clients about career aspirations and have attempted to provide services to help deaf clients select a feasible career and reach their goal of employment.

Because of their expertise in rehabilitation, eight vocational rehabilitation counselors with responsibility for deaf clients in their areas were interviewed. They were asked what occupational training curricula would be most suited to deaf people, not as a limiting factor, but as a guideline for new postsecondary programs.

None of the counselors had immediate or strong reactions to this question. A possible reason for this lack of immediate response is that these counselors are familiar with the capabilities of deaf people, and are not accustomed to thinking of them as a group which is ideally suited for a limited number of occupations. After some consideration, half of the counselors mentioned clerical or business office training; three mentioned health technologies, such as dental lab technician and medical assistant;

three mentioned computer-related fields such as data processing; two mentioned mechanic trades; other occupations listed by individual counselors included industrial sewing, locksmithing, lens grinding, commercial art, and construction trades.

The three occupational areas most often mentioned by counselors happen to be ones in which projected growth is expected to be faster than average, according to the Occupational Outlook Handbook. State of Maryland projections favor these occupations as well.

Summary and Recommendations

A community college, vocational center or other institution intending to serve deaf students should offer a wide range of occupational training so that deaf people can be flexible in their choice of careers while taking advantage of suitable support services.

Priority should be given to occupations which have favorable employment projections for the next ten years; which require training such as a community college or vocational center might offer; which have relatively few chances of discrimination against the deaf applicant; and which are not dependent upon hearing. Based on these criteria, it is recommended that a college or vocational center serving deaf clients offer:

1. A variety of office occupations, including clerical, secretarial and executive secretarial training.
2. Management and supervisory training to help alleviate the underemployment problem.

3. A variety of computer-related occupations.
4. Training for mechanics, repairers and installers.
5. Offerings in health service fields, including technicians.
6. Construction crafts training.
7. Training for engineering and science technicians.

Further Research. A career counselor in a community college, vocational center, or rehabilitation setting should be aware of entrance requirements for occupations before counseling the deaf student. When written tests are required the reading level of the test should be known. Task analyses for occupations should be available so that the counselor and student or client can judge the advisability of training for that career. Often, minor changes in a work routine or the removal of a telephone can alter the job so that it no longer presents a barrier to a deaf person's employment. However, without a rather comprehensive knowledge of the job, the counselor may not realize what modifications can be made. Research in the field should include:

1. An analysis of written requirements for licenses, union admission, and job entrance to some large occupations.
2. Task analyses of jobs and the relation of these tasks to hearing impairments.
3. A survey of noise related occupations, which are ideally suited to many deaf people.

REFERENCES

Klein, E. T. Employment practices and trends in industry and their implications for the deaf. Journal of Rehabilitation of the Deaf, Monograph No. 2, 1970. pp. 1-9.

Maryland Department of Human Resources. Maryland Employment Projections, Draft 1. 1974-1985.

Schein, J. D. and Delk, M. T., Jr. The Deaf Population of the United States. Silver Spring, Md.: The National Association of the Deaf, 1974. pp. 73-98.

Silver, N. H. Employment practices and trends in industry. Journal of Rehabilitation of the Deaf, Monograph No. 2, 1970. pp. 10-14.

United States Department of Labor. Occupational Outlook Handbook. U.S. Dept. of Labor Bulletin 1875, 1976.

Williams, W. Employment practices and trends in large industry. Journal of Rehabilitation of the Deaf, Monograph No. 2, 1970. pp. 15-21.

APPENDIX A

Postsecondary Programs for Deaf Students - Feasibility Study

Advisory Committee

Mrs. Ruth Brown, Staff Specialist
Maryland State Dept. of Education
Division of Vocational Education

Mr. Frank Bryan, Principal
Maryland School for the Deaf
Columbia Campus

Ms. Norma Buemi, Vocational
Rehabilitation Counselor
Division of Vocational Rehabilitation

Mrs. James Clark, Jr.
Parent and Community Member

Mr. Edward E. Corbett, Jr.
Asst. Superintendent
Maryland School for the Deaf

Dr. David M. Denton, Superintendent
Maryland School for the Deaf

Mr. Joseph P. DeSantis
Staff Specialist in Vocational-Technical
Education
Maryland State Dept. of Education

Mr. Ron G. Frank
Director of Community Education
Gallaudet College

Ms. Gertrude Galloway, Vice Principal
Maryland School for the Deaf
Columbia Campus

Mrs. Bernice Hoeper, Counselor
Lutheran Mission Society

Mr. Edward T. Kilcullen, Consultant
in Services to the Deaf
Maryland State Dept. of Education
Division of Vocational Rehabilitation

Dr. Leonard Siger
Research Associate
Baltimore City Dept. of Education

Mr. James S. Smith
Associate Dean of Instruction
Howard Community College

Mrs. Jackie Stover, Liaison Worker
Baltimore City Public Schools

Dr. McCay Vernon, Professor
Western Maryland College

Ms. Judith R. Williamson
Extension Agent
University of Maryland

Ms. Anne Marie Zalewski,
Faculty Member
Howard Community College

APPENDIX B

Specific Occupations Included in Occupational Categories Listed in Table 3.

- All Other Clerical Workers
  - Bank Tellers
  - Billing Clerks
  - Bookkeepers
  - Cashiers
  - Clerical Assistants, Social Welfare
  - Clerical Supervisors, NEC
  - Bill and Account Collectors
  - Counter Clerks, Exc. Food
  - Dispathcer, Starter, Vehicle
  - Enumerators and Interviewers
  - Estimators and Investigators, NEC
  - Expeditors and Prod. Controllers
  - File Clerks
  - Insurance Adjusters and Examiners
  - Library Attendants and Assistants
  - Mail Carriers, Post Office
  - Mail Handlers, Exc. Post Office
  - Messengers and Office Helpers
  - Meter Readers, Utilities
  - Payroll and Time Keeping Clerks
  - Postal Clerks
  - Proofreaders
  - Real Estate Appraisers
  - Receptionists
  - Shipping and Receiving Clerks
  - Statistical Clerks
  - Stock Clerks and Store Keepers
  - Teachers Aides, Exc. Monitors
  - Telegraph Messengers
  - Telegraph Operators
  - Ticket Station, Express Agents
  - Weighers
  - Miscellaneous Clerical Workers, NEC

- Stenographers, Typists, Secretaries
  - Secretaries, Legal
  - Secretaries, Medical
  - Secretaries, Other
  - Stenographers
  - Typists

- Sales Workers
  - Advertising Agents and Sales Workers
  - Auctioneers
  - Demonstrators
  - Hucksters and Peddlers
  - Insurance Agents, Brokers, Etc.
  - Newspaper Carriers and Vendors
  - Real Estate Agents and Brokers
  - Stock and Bond Sales Agents
  - Sales and Sales Workers, NEC

- All Other Managers, Officials, Proprietors
  - Funeral Directors
  - Building Managers and Superintendants
  - Office Managers, NEC
  - Ship Officers, Pilots, Pursers
  - Officials of Lodges and Unions
  - Railroad Conductors
  - Restaurant, Cafe and Bar Managers
  - Other Managers, Administrators

- Construction Crafts Workers
  - Carpenters and Apprentices
  - Brick and Stonemasons and Apprentices
  - Bulldozer Operators
  - Cement and Concrete Finishers
  - Electricians and Apprentices
  - Excavating, Grading, Machine Operator
  - Floor Layers, Exc. Tile Setters
  - Painters and Apprentices
  - Paperhangers
  - Plasterers and Apprentices
  - Plumber, Pipefitters and Apprentices
  - Roofers and Slaters
  - Structural Metal Craft Workers
  - Tilesetters
  - Blue Collar Worker Supervisors, NEC

- All Other Professional, Technical
  - Accountants
  - Architects
  - Archivists and Curators
  - Clergy
  - Religious, Exc. Clergy
  - Farm Management Advisors
  - Foresters and Conservationists
  - Home Management Advisors
  - Judges
  - Lawyers
  - Librarians
  - Operations, Systems Research
  - Personnel Labor Relations
  - Research Workers, NEC
  - Recreation Workers
  - Social Workers
  - Vocational and Educational Counselors

- Health Service Workers
  - Dental Assistants
  - Health Aides, Except Nursing
  - Health Trainees
  - Lay Midwives
  - Nurses Aides, Orderlies
  - Practical Nurses

APPENDIX B (Continued)

- Medical Workers, Exc. Technicians
    - Chiropractors
    - Dentists
    - Dietitians
    - Optometrists
    - Pharmacists
    - Physicians, MD Osteopaths
    - Podiatrists
    - Registered Nurses
    - Therapists
    - Veterinarians
    - Other Medical and Health Workers

- Food Service Workers
    - Bartenders
    - Waiters' Assistants
    - Cooks, Exc. Private
    - Dishwashers
    - Food Counter, Fountain Workers
    - Waiters
    - Food Workers, NEC Exc. Private

- Cleaning Service Workers
    - Lodging Quarters Cleaners Exc.
    - Building Interior Cleaners, NEC
    - Janitors and Sextons

- Mechanics, Repairers, Installers
    - Air Cond., Heating and Refrig. Mechanic
    - Aircraft Mechanics
    - Auto Accessories Installers
    - Auto Body Repairers
    - Auto Mechanics and Apprentices
    - Data Processing Machine Repairers
    - Farm Implement Mechanics
    - Heavy Equipment Mechanics Incl. Deisel
    - Household Appliance Mechanics
    - Loom Fixers
    - Office Machine Repairers
    - Radio and Television Repairers
    - Railroad and Car shop Repairers
    - Other Mechanics and Apprentices

- Buyers, Sales, Loan Managers
    - Bank and Financial Managers
    - Credit Managers
    - Buyers and Shippers of Farm Prod.
    - Buyers in Wholesale and Retail
    - Purchasing Agents and Buyers, NEC
    - Sales Managers, Retail Trade
    - Sales Managers, Exc. Retail Trade

- Personal Service Workers
    - Flight Attendants
    - Attendants, Recreation, Amusement
    - Attendants, Personal Service, NEC
    - Baggage Porters and Bellhops
    - Barbers
    - Boarding, Lodging Housekeepers
    - Bootblacks
    - Child Care Workers, Exc. Private
    - Elevator Operators
    - Hairdressers, Cosmetologists
    - Housekeepers, Exc. Private
    - School Monitors
    - Ushers, Recreation, Amusement
    - Welfare Service Aides

- Operatives, Exc. Transportation

- Semiskilled Metalworking
    - Drill Press Operatives
    - Furnace Tenders, Smelters, Pourers
    - Grinding Machine Operatives
    - Heaters, Metal
    - Lathe, Milling Machine Operatives
    - Metal Platers
    - Other Precision Machine Operators
    - Punch Stamping Press Operatives
    - Solderers
    - Welders and Flame Cutters

- Semiskilled Textile
    - Carding, Lapping, Combing Operators
    - Knitters, Loopers, and Toppers
    - Spinners, Twisters, Winders
    - Weavers
    - Other Textile Operatives

- Semiskilled Packers, Inspectors
    - Manuf. Checkers, Examiners, Etc.
    - Manuf. Graders and Sorters
    - Meat Wrappers, Retail Trade
    - Packers, Wrappers, Exc. Meat, Produce
    - Prod. Grinders, Packers, Exc. Fact.

- Writers, Artists, Entertainers
    - Actors
    - Athletes and Kindred Workers
    - Authors
    - Dancers
    - Designers
    - Editors and Reporters

APPENDIX B (Continued)

- Musicians and Composers
- Painters and Sculptors
- Photographers
- Public Relations Specialists
- Radio, TV Announcers
- Writers, Artists, Entertainers, NEC

- Laborers, Except Farm
    - Animal Caretakers, Exc. Farm
    - Carpenter's Helpers
    - Construction Labor, Exc. Carp. Help
    - Fishers, Hunters and Trappers
    - Freight, Material Handlers
    - Garbage Collectors
    - Gardeners, Groundkeepers, Exc. Farm
    - Longshore Workers, Stevedores
    - Timbercutting, Logging Workers
    - Stock Handlers
    - Teamsters
    - Vehicle Washers, Equipment Cleaners
    - Warehouse Laborers, NEC
    - Other Laborers

- Engineering and Science Technicians
    - Agriculture and Bio. Tech. Exc. Health
    - Chemical Technicians
    - Drafters
    - Electrical and Electronic Tech.
    - Industrial Engineering Tech.
    - Mathematical Technicians
    - Mechanical Engineering Technicians
    - Surveyors
    - Engineering and Science Tech. NEC

- Teachers
    - Adult Education Teachers
    - College and University Teachers
    - Elementary School Teachers
    - Preschool and Kindergarten Teachers
    - Secondary School Teachers
    - Teachers NEC, Exc. Colleges and Univer.

- Protective Service Workers
    - Crossing Guard, Bridgetenders
    - Firefighters
    - Guards
    - Marshals and Constables
    - Police and Detectives
    - Sheriffs and Bailiffs

- Administrators, Public Inspectors
    - Assessors, Controllers, Local Pub. Admi
    - Construction Inspector, Public
    - Health Administrators
    - Inspectors, Exc. Pub. Construction
    - Public Officials and Administrators
    - Postmasters and Mail Supervisors
    - College Administrators
    - Elementary and Secondary Administrators

- Computer Specialists
    - Computer Programers
    - Computer Systems Analysts
    - Other Computer Specialists

- Engineers, Technical
    - Engineers, Aero-Astronautic
    - Engineers, Chemical
    - Engineers, Civil
    - Engineers, Electrical
    - Engineers, Industrial
    - Engineers, Mechanical
    - Engineers, Metallurgical
    - Engineers, Mining
    - Engineers, Petroleum
    - Engineers, Sales
    - Engineers, Other

- Transportation Equipment Operatives
    - Boat Operators
    - Bus Drivers
    - Conductors and Operators, Urban Rail
    - Delivery and Route Workers
    - Fork Lift, Tow Motor Operatives
    - Rail Vehicle Operators, NEC
    - Parking Attendants
    - Railraod Brake Operators
    - Railroad Switch Operators
    - Taxicab Drivers, Chauffeurs
    - Truck Drivers
    - All Other Transportation Operatives

- All Other Operatives, Exc. Transportation
    - Asbestos, Insulation Workers
    - Assemblers
    - Blasters
    - Bottling, Canning Operatives
    - Surveyor Helpers
    - Clothing Ironers and Pressers

APPENDIX B (Continued)

- Cutting Operatives, NEC
- Dressmakers, Exc. Factory
- Drillers, Earth
- Dry Wall Installers, Lathes
- Dyers
- Filers, Polishers, Sanders, Buffers
- Garage Workers, Gas Station Attendants
- Laundry, Dry Cleaning Operators, NEC
- Meat Cutters, Butchers, Exc. Mfg.
- Meat Cutters, Butchers
- Milleners
- Mine Operatives, NEC
- Mixing Operatives
- Oilers, Greasers, Exc. Auto
- Painters, Mfg. Articles
- Photographic Process Workers
- Riveters and Fasteners
- Sailors and Deckhands
- Sawyers
- Sewers and Stichers
- Shoemaking Machine Operatives
- Furnace Tendr., Stokr., Exc. Metal
- Winding Operatives, NEC
- Miscellaneous Machine Operatives
- Operatives, NEC

Health Technologists and Technicians
- Clinical Lab Technol. and Tech.
- Dental Hygienists
- Health Record Technol. and Tech.
- Radiologic Technol. and Tech.
- Therapy Assistants
- Other Health Technol. and Tech.

Appendix C
of
Final Report

Report 3: Complementary Community Resources for a Community College Program for Deaf Students

Complementary Community Resources for a Community College Program for Deaf Students

Community college students sometimes need services outside of those provided by the community college. If the college is not equipped to handle a problem or answer a need, a counselor or faculty member may refer the student to an agency or volunteer group in the community for assistance.

What happens if the student is deaf? Are these community services open to deaf people?

Theoretically, the answer is yes. Deaf people, as taxpaying citizens and members of their communities, have the right to use these services. In practice, however, deaf people very often do not have access to the services of a community because of the communication gap and a lack of awareness among public servants of the implications of deafness. Anyone who has deaf friends has heard frustrating stories of the problems these individuals have encountered. Although frustrations with public service agencies are not unique to deaf people, they are more severe because every length of red tape results in more communication, more use of the telephone, more angry or uncomfortable faces.

Thus, the college counselor of deaf students must choose 1) to allow the student's problems to continue without outside assistance; 2) to refer the student to the appropriate agency and let the student handle it alone; or 3) to provide support necessary (in many cases, this will begin with an interpreter). Of course, if a nearby agency provides direct services for deaf people, the referral can have successful results. For example, in Howard County, a deaf person can call a teletype number at Central Alarm for information and referral assistance. Legal problems can be referred to the law clinic of the National Center for Law and the Deaf. It is the exception to the rule, however, when deaf people have direct access to an agency.

If the counselor can arrange for an interpreter for the student, the problem may seem to be resolved, but who pays for the interpreter's time? Does one interpreter follow through on subsequent visits? What if counseling is required? The interpreter is a poor substitute for one-to-one counseling. What happens if the problem is a very personal one, and the student does not want to use an interpreter whom he sees every day in class?

Obviously, a simple referral becomes a complex issue for the deaf person and the professional who serves him. The process of changing this situation is a huge one, involving change in both large complex bureaucracies and small organizations which function on very limited budgets. Moreover, there has been very little pressure to open more services for deaf people. Many deaf people, long since conditioned by useless contacts with certain agencies, have stopped trying to obtain services.

Method

In an attempt to locate available community services for deaf individuals, two basic methods were used. First, an analysis of the Directory of Services for the Deaf in Maryland and Washington, D.C., 1976, compiled by Cindy Scheib of Western Maryland College, was made to determine where existing services for the deaf people are centralized. This booklet is an essential resource for any community college serving deaf students.

Second, a spot check of those agencies most likely to be used by community college students was made to attempt to learn of any services available in addition to those listed in the Directory. The researcher received valuable information on outside agencies typically used by college students from Rod Ferrell, of the Student Services Department at Gallaudet College, and Dr. Robert Levine, a counselor at Howard Community College.

Analysis of the Directory of Services

The services included in this analysis were ones which serve a community college-aged clientele. Also, only services in metropolitan Baltimore and metropolitan Washington, D.C. were included, since these are the two population centers of the state. The agencies were separated according to area served: Washington or Baltimore. This was determined by the location of the main office, and then the locations of any branch offices.

Generally speaking, metropolitan Washington provides much more comprehensive services for deaf people than does metropolitan Baltimore. This is probably due to the fact that Gallaudet College is located there, and often deaf people will become established in the community near the school from which they have recently graduated. Gallaudet College has worked with local agencies to provide support services for their students. The members of the deaf community in Washington are better educated, and thus exert more pressure on agencies to provide comprehensive support services. The Baltimore deaf population is less well educated than the Washington deaf population. Thus, they are placed in the position of not knowing how to work through the system and exert pressure to better the services offered. Consequently, Baltimore's deaf population does not have adequate support services.

For the following information, some definitions are necessary. "Services for deaf people" refers to having personnel trained in sign language and/or deafness, and/or having a TTY service. Many agencies will provide an interpreter for the deaf client, but this is not an actual service by agency personnel. Usually, the deaf individual must demand an interpreter, and often they are still not provided.

All metropolitan Washington police forces have TTY services, and at least several employees trained in sign language, whereas the metropolitan Baltimore area only has two TTY's: one at the State Police headquarters in Pikesville, and one at the Howard County Police Department. The latter teletype serves all of the Baltimore area. Capitol Transit Authority provides a TTY service to relay information and bus schedules, while Baltimore's Mass Transit Administration does not provide this service.

The Washington area has 13 churches serving the deaf community; Baltimore has four. Four recreational and social programs and clubs have been established in Washington, as compared to one in Baltimore. There are six additional programs which serve both metropolitan areas.

Metropolitan Washington offers eight information and referral services, whereas Baltimore offers three. An additional eight services serve both areas. Metropolitan Washington has six educational and library services as compared to one in Baltimore. Four additional services serve both areas.

All speech and hearing clinics in both metropolitan areas claim to have staff trained in sign language. Most other services are equally distributed between the two metropolitan areas, but are not sufficient to meet the need.

There may have been some changes in services offered since the directories are one to two years old.

A Spot Check of Other Agencies

Originally, the intent was to include any social service agency that might possibly be used by a deaf community college student. A survey of the Directory of Community Services in Maryland, 1975 (Health and Welfare Council of Central Maryland, Inc.) was made to locate possible agencies in these two metropolitan areas that would be beneficial to deaf community college students. A list of over 500 agencies was compiled, and due to a lack of time and resources, this has to be greatly limited.

Agencies offering key types of services such as abortion and family planning counseling, alcohol and drug counseling, general counseling and guidance, mental health services, medical health services, police services, and transportation services, were contacted. A spot check of one or two agencies in each category of service was made by telephone to each metropolitan area. A verbal questionnaire was administered to determine if services are provided for deaf clients, or if the agency will begin serving a deaf clientele. In some cases, the person interviewed knew of existing services elsewhere. When this happened, the researchers followed up with a call to the agency mentioned. Information gathered from the telephone interviews has been included as an example of what services are or are not available; specific information can be found in Appendix A. These services will be the focus for the recommendations for improving service delivery to deaf clients.

In this report, agencies contacted are grouped according to the types of existing or potential services to deaf people. The area served by each agency will be included.

Results of the Spot Checks

A group of abortion clinics and family planning and counseling services were contacted. Of the agencies contacted, only one center in Washington had services for deaf clients, and one agency that provides services to both metropolitan areas said they provide interpreters for deaf clients. The other four agencies provide no services for deaf people.

Basically, most hospitals, including St. Elizabeth's Hospital, will provide interpreters for deaf patients, with only Good Samaritan Hospital in Baltimore offering no services for deaf people. St. Elizabeth's Hospital and Greater Baltimore Medical Center both have personnel trained in deafness and sign language. The Maryland State Mental Hygiene Administration is placing no pressure on the state public and private mental health facilities to provide services for deaf people. Consequently, very few workers learn sign or specialize in deafness.

Of the information and referral services contacted, they were fairly well split in providing services for deaf people. The American National Red Cross, Deaf Referral Services, the National Center for Law and the Deaf, and the University of Maryland Cooperative Extension Service provide comprehensive services for both deaf communities, each in their own area. The Washington Society of Clinical Psychologists refers all cases to one psychologist who is deaf. Three lawyers in the Montgomery County Bar Association have TTY services. No list has been compiled of those lawyers, dentists, psychologists, physicians, emergency service workers, workers for the Maryland State Division of Vital Statistics, or employees of the Maryland State Mass Transit Administration who know sign language or who are specialized in working with deaf people. The Health and Welfare Council of Central Maryland, Inc., has a joint information and referral service established with Deaf Referral Services, where if DRS cannot answer a question they can call the Health and Welfare Council for the information and then relay it back to the deaf individual. The Social Security Administration and Internal Revenue Service both have TTY services, and have trained some staff in sign language. Catholic Deaf of Baltimore provides comprehensive religious, social, and counseling services for Catholic deaf individuals.

No alcohol or drug abuse self-help groups are available in the Baltimore-Annapolis area, however, Alcoholics Anonymous in Washington has one group for deaf people. Although Alcoholics Anonymous headquarters has no TTY service, the deaf group does have a TTY.

Most of the hotlines contacted have workers who specialize in deafness and who know sign language. All but one have TTY services, or will be getting them in the near future.

All rehabilitation services contacted have at least several staff members who are trained in sign language and offer comprehensive services for deaf clients. Most are presently in the process of getting TTY services.

The local Departments of Social Services are split between the two metropolitan areas in providing services for the deaf communities. Baltimore City has one worker trained in sign language and deafness, while Anne Arundel County will provide an interpreter, and Prince George's County has some staff who know sign language. Howard, Montgomery, and Baltimore Counties require deaf people to provide their own interpreters. These agencies are required by law to offer comprehensive services to deaf people, but there has been no pressure placed on them to make them provide services.

Baltimore City Department of Recreation and Parks has a center for the handicapped and is presently working to expand their existing services for deaf people. Anne Arundel, Prince George's and Howard Counties will provide interpreters for deaf groups of greater than three people. Montgomery and Baltimore Counties offer no programs for deaf people.

All Baltimore-Annapolis area health departments have no staff trained in sign language or deafness. Consequently, the deaf client must provide his own interpreter if they want to use these services. Montgomery County will provide an interpreter, and Prince George's County has one volunteer in the department on Tuesdays who knows sign language. However, no real services are provided for the deaf clients by the department staff.

All Washington area public libraries have TTY services and are training staff in sign language. Baltimore City and County and Anne Arundel County have no TTY service, and all but Baltimore County has staff trained in sign language. Montgomery County provides education and consumer education programs for deaf people.

The final major group of services contacted were police and correctional services. Maryland State Police, Metropolitan (Washington) Police, Prince George's and Howard Counties have TTY services. Baltimore City and County, Metropolitan (Washington), Montgomery, Howard and Prince George's Counties Police forces have access to several people who know sign language and are on call 24 hours per day. Mainly police forces rely on writing or the deaf individual providing his own interpreter. The District Court of Maryland is required by law to provide interpreters for deaf people, however, they have not trained staff in sign language or deafness. The Maryland State Division of Parole and Probation has no staff trained in sign language or deafness, according to the person interviewed. The deaf person must provide his own interpreter to use these services.

A Caution. Because the agencies were self-reporting, it is difficult to judge the actual availability of services. For example, a reported staff member who knows sign language may actually be familiar with fingerspelling, or may have taken a beginning course in manual communication at one time. Although such employees are well intentioned, their capacity to assist in anything except superficial contacts may be very limited.

This spot check as a means of obtaining information on services is at best sketchy. It is not intended as a guide for all services in Maryland, but rather as a barometer to indicate to what extent conditions for Maryland's deaf people are improving. The Directory of Services for the Deaf in Maryland and Washington, D.C., 1976 is the best local summary of services at our disposal.

Other Resources: Staffing a Community College Program

The Maryland-Washington, D.C. area is fortunate to have excellent training programs in deafness. Graduate programs at Western Maryland College and Gallaudet College prepare teachers of deaf children; Western Maryland College and the University of Maryland prepare social workers in deafness; Gallaudet College also prepares audiologists, counselors, and administrators who desire employment serving deaf people. In addition, there are numbers of professionals with substantial experience working with deaf adults in the state. A new program for deaf students in a community college should have little difficulty in locating trained and experienced professional staff.

Many speech and hearing agencies are located in Maryland. A new program for deaf students should attempt to establish a cooperative arrangement with such an agency so that students can have the benefit of their facilities and trained staff.

Probably the biggest problem to be faced in staffing a program is the lack of available interpreters locally. The Baltimore area has few certified interpreters. In the Washington, D.C. metropolitan area, there are substantial numbers of certified interpreters but, unfortunately, most of them are already employed full-time in some professional capacity. Frederick has a fair supply of skilled people, but as in Washington, D.C., many are employed full-time elsewhere.

Therefore, a community college which elects to serve deaf students should also provide interpreter training, either in the non-credit or credit program. Fortunately, the regional office of the National Interpreter Training Consortium is located at Gallaudet College. The charge of the NITC (funded by the Rehabilitation Services Administration) is to assist in the establishment of and improvement in interpreter training. Technical assistance and some materials are available free of charge from this office.

Deaf adults do not have equal access to most community resources used by the general public. This situation complicates the referral process when a deaf community college student needs outside assistance.

A helpful resource for community college personnel working with deaf students is A Directory of Services for the Deaf in Maryland and Washington, D.C., 1976. Also, Appendix A of this report lists almost 100 state and local agencies and indicates the presence or absence of services for deaf individuals in each.

Of the two population centers in Maryland, the Washington, D.C. metropolitan area has far more services for deaf individuals. In considering an ideal site for a community college program, this is an important factor which can be analyzed two ways. On one hand, locating a program among other community resources serving deaf people will have a positive influence on the early years of a program for deaf students. However, the presence of a new community college program can in turn stimulate increased awareness and new services in the surrounding area. Since the Baltimore area is lacking in services, would it be a more balanced approach to aim for a community college program there? There is no simple answer to this question.

Recruitment of full-time professional staff for a community college program for deaf students should not be difficult in this area. Increased interpreter training opportunities may be necessary, since several part-time interpreters will be needed at all times. Ideally, the interpreter training courses should be offered by the community college serving deaf students, so that a supply of interpreters is available and so that new interpreters can have access to practicum experiences.

APPENDIX A

SERVICE DELIVERY IN SELECTED STATE AND LOCAL AGENCIES

ype of gency	Name of Agency	Description of Services	Services for Deaf
nformation and eferral Services	American National Red Cross Baltimore Regional Chapter	public information and help emergency services	sign language classes, emergency interpretation, Deaf Awareness programs, first aid classes for deaf, blood donor coverage
	Deaf Referral Services, Inc.	information and referral, counseling, education	comprehensive services for deaf
	National Center for Law and the Deaf	legal counseling, legal action and advocacy, lawyer referral, education workshops	comprehensive services for deaf
	Washington Society of Clinical Psychologists	information and referral for psychologists	all cases referred to one deaf psychologist who signs
	Psychologist Referral Service of the Baltimore Association of Consulting Psychologists	psychological information and referral	no services provided for deaf deaf must provide own interpreter
	Maryland State Dental Association	dental information and referral	hope to develop list of dentists who know sign and would like to add a TTY service
	Lawyer Referral Services of the Bar Association of Montgomery County	lawyer information and referral	3 lawyers have TTY, very interested in helping deaf, but don't have list of lawyers who know sign
	Lawyer Referral Service of Baltimore County	lawyer information and referral	no services for deaf, deaf must provide own interpreter
	Health and Welfare Council of Central Maryland, Inc.	general information and referral services, food stamp hotline	has referral system set up with Deaf Referral Services
	Baltimore County Medical Association	medical information and referral	no services for deaf
	Prince George's Medical Society	medical information and referral	no services for deaf
	Maryland Poison Information Center	emergency poison medical services	presently no services for deaf, but want to incorporate it as soon as possible
	Maryland State Department of Transportation	mass transit transportation, transportation services	no services for deaf
	Maryland State Division of Vital Records	registers birth and deaths, marriages and divorces	no services for deaf, depend on writing
	University of Maryland Cooperative Extension Service	continuing education, information & referral services	provide interpreters for deaf people and have special classes for deaf
	Direct Search for Talent	motivate young adults into appropriate post-secondary education programs; provides some financial aid	no services available for deaf but interested once community college program for deaf is initiated

pe of ency	Name of Agency	Description of Services	Services for Deaf
formation and ferral Services (cont'd.)	United States Social Security Administration	programs for retired, disabled, handicapped; public information	some staff knows sign, they provide interpreter if appointment made in advance SSI available for deaf people
	Internal Revenue Service	federal income tax agency	provides TTY service for deaf, some staff signs
Religious and cial	Catholic Deaf of Baltimore	religious and social services, pastoral counseling	staff knows sign and has TTY service all services provided for deaf
elf-Help oups	Alcoholics Anonymous Intergroup office	help alcoholics stop drinking	no services for deaf, no staff signs, no TTY service
	Raft House, Inc.	help alcoholics stop drinking, counseling and health services	no services for deaf, no staff signs, no TTY service
	WAIA Headquarters	help alcoholics stop drinking, help them solve their problems	discontinued TTY service for financial reasons, one deaf group to provide services
tlines	Contact Baltimore, Inc.	counseling center with hotline	TTY service beginning Spring, 1977; counseling available to deaf; special training on TTY and in deafness
	Grassroots, Inc.	Counseling center with hotline	trained workers in deafness, if finances allow will get TTY, one worker knows sign
	Hotline for the Deaf	emergency hotline	TTY service, workers trained in deafness
	Prince George's Hotline	emergency hotline	TTY service, workers trained in deafness
	Focalo, Inc.	hotline, and street counseling	one woman knows manual alphabet; no training in deafness
eech and Hearing Centers	Loyola College Speech and Hearing Center	comprehensive speech and hearing clinic services	no services for manual deaf complete services for oral deaf
	Johns Hopkins Hospital Hearing and Speech Center	comprehensive speech and hearing clinic services	some workers know sign
	Howard University Speech and Hearing Clinic	comprehensive speech and hearing clinic services	3 workers know elementary sign
	Hearing and Speech Agency of Metropolitan Baltimore	comprehensive speech and hearing clinic services	some workers know sign
	Greater Baltimore Medical Center Speech and Hearing Clinic	comprehensive speech and hearing clinic services	no staff knows sign; deaf must provide own interpreter
	Towson State University Speech and Hearing Clinic	comprehensive speech and hearing clinic services	some staff knows elementary sign

Type of Agency	Name of Agency	Description of Services	Services for the Deaf
Speech and Hearing Centers (cont'd.)	Catholic University of America Speech and Hearing Clinic	comprehensive speech and hearing services	deaf must provide own interpreter
	Federal City College Speech and Hearing Clinic	comprehensive speech and hearing services	one audiologist knows elementary sign
	George Washington University Speech and Hearing Clinic	comprehensive speech and hearing services	some workers know elementary sign
	Washington Hearing and Speech Society	comprehensive speech and hearing services	staff knows sign
	University of Maryland Speech and Hearing Clinic	comprehensive speech and hearing services	one staff person knows sign
	University of Maryland Hospital Audiology and Speech Service	comprehensive speech and hearing services	staff does not sign
Rehabilitation Services	Montgomery County Society for Crippled Children and Adults, Inc.	diagnostic, evaluation, and rehabilitation services	staff knows sign, have TTY service, some staff trained i deafness
	John F. Kennedy Institute for the Habilitation of the Mentally and Physically Handicapped Child	diagnostic, evaluation, and rehabilitation services	one or two staff members sign no staff trained in deafness
	Baltimore-Central Maryland League for Crippled Children and Adults, Inc.	diagnostic, evaluation, and rehabilitation services	personal adjustment services for deaf when in job, counseling for deaf, vocational training for deaf all staff has good sign skills, try to get TTY in 1978
	Maryland State Department of Education, Division of Vocational Rehabilitation	Diagnostic, evaluation, and rehabilitation services	some staff trained in deafness some staff knowns sign; comprehensive services for the deaf
Departments of Social Services	Howard County Department of Social Services	public assistance, counseling; day care, medical assistance	deaf must provide own interpreter, want to train staff in sign in future
	Baltimore County Department of Social Services	public assistance, counseling; day care, medical assistance	usually refer client to Baltimore City DSS deaf must provide own interpreter
	Baltimore City Department of Social Services	public assistance, counseling; day care, medical assistance	most services available to deaf, one staff member trained in sign language and deafness
	Anne Arundel County Department of Social Services	public assistance, counseling; day care, medical assistance	they will provide an interpreter; want to train staff in sign in future
	Prince George's County Department of Social Services	public assistance, counseling; day care, medical assistance	some staff knows sign - must have appointment in advance at staff member's convenience

pe of Agency	Name of Agency	Description of Services	Services for the Deaf
partments of ocial Services (cont'd.)	Montgomery County Department of Social Services	public assistance, counseling; day care, medical assistance	deaf must provide own interpreter no services for deaf, but must be served
partments of creation and Parks	Baltimore County Department of Recreation and Parks	maintains park and recreation facilities and coordinates recreational programs	deaf must provide own interpreter - no services for deaf
	Baltimore City Department of Recreation and Parks	maintains park and recreation facilities and coordinates recreational programs	have center for handicapped staff knows sign, begin programs for deaf young adults September 1977
	Anne Arundel County Department of Recreation and Parks	maintains park and recreation facilities and coordinates recreational programs	deaf groups of 3 or more people must apply, then they will provide interpreter; willing to begin training staff in sign language and deafness
	Prince George's County Department of Recreation and Parks	maintains park and recreation facilities and coordinates recreational programs	provide interpreters from Gallaudet College; all programs open to deaf
	Montgomery County Department of Recreation and Parks	maintains park and recreation facilities and coordinates recreational programs	presently working to develop program for deaf people
	Howard County Department of Recreation and Parks	maintains parks and recreation facilities and coordinates recreational programs	provide interpreters from Maryland School for the Deaf, Columbia Campus
Health partments	Howard County Health Department	comprehensive health and mental health services	deaf must provide own interpreter no staff trained in sign or deafness
	Baltimore County Department of Health	comprehensive health and mental health services	deaf must provide own interpreter no services for deaf
	Baltimore City Health Department	comprehensive health and mental health services	deaf must provide own interpreter no trained staff in sign or deafness
	Anne Arundel County Health Department	comprehensive health and mental health services	deaf must provide own interpreter no trained staff in sign or deafness
	Prince George's County Health Department	comprehensive health and mental health services	one volunteer on Tuesdays knows sign, otherwise no services for deaf
	Montgomery County Health Department	comprehensive health and mental health services	they will provide an interpreter no staff trained in deafness
blic braries	Montgomery County Department of Public Libraries	complete library and information services	one branch has TTY, consumer education programs interpreted for deaf; training staff in sign
	Howard County Public Library	complete library and information services	one branch has TTY, some staff knows sign

pe of ency	Name of Agency	Description of Services	Services for the Deaf
bic braries (cont'd.)	Anne Arundel County Public Library	complete library and information services	training staff in deafness, some staff knows sign, no TTY service
	Enoch Pratt Free Library of Baltimore City	complete library and information services	some staff knows sign, presently no TTY service, but possibly get it in future
	Baltimore County Public Library	complete library and information services	deaf must provide own interpreter no services for deaf
	Prince George's County Memorial Library	complete library and information services	have TTY service, some staff knows sign
lice and orrectional rvices	Maryland State Police	comprehensive police services	have TTY at Headquarters in Pikesville, no staff trained in sign or deafness
	Baltimore County Police Department	comprehensive police services	no TTY service, wives of 3-4 men know sign and are on call
	Baltimore City Police Department	comprehensive police services	no TTY service, mainly depend on writing, few staff know sign language
	Metropolitan Police Department	comprehensive police services	some staff trained in sign language and deafness, have TTY service
	Montgomery County Police Department	comprehensive police services	2 workers know sign language, mainly depend on writing, no TTY service
	Howard County Police Department	comprehensive police services	some staff knows sign and trained in deafness, trying to get TTY
	Anne Arundel County Police Department	comprehensive police services	no services for deaf, no TTY service no staff trained in sign or deafness
	Prince George's County Police Dept.	comprehensive police services	have TTY service some staff knows sign
	District Courts of Maryland	handles traffic cases, criminal misdemeanors, some felonies and civil cases	court must provide interpreter no staff trained in sign or deafness
	Maryland State Department of Public and Correctional Services	handles parole and probation hearings and cases	no staff trained in sign or deafness deaf must provide own interpreter

ype of Agency	Name of Agency	Description of Services	Services for Deaf
bortion & Family Planning Counseling	Hillcrest Clinic and Counseling Service	comprehensive women's clinic including counseling and women's medical services and abortions	no service for deaf - everything must be written, interested in program
	Women's Medical Center of D.C.	comprehensive women's clinic including counseling and women's medical services, and abortions	will add TTY Feb., 1977 train volunteers from Galldaudet College continuing education at Gallaudet College specialized workers in deafness & sign language
	Maryland Children's Aid and Family Service Society, Inc.	general counseling and family life enrichment	no services for deaf deaf provide own interpreters
	Childbirth Education Association of Baltimore	courses in child[illegible]th preparation, pre-[illegible]d post-natal exercises	no services for deaf, deaf provide own interpreter
	Family and Child Services of Washington DC.	family counseling, adoption services	no services for deaf, deaf provide own interpreter
	Planned Parenthood Association of Maryland, Inc.	family planning, abortions, counseling, birth control & birth control counseling	they are interested in helping and will provide an interpreter, no specialized workers in deafness
	Parent and Child, Inc.	childbirth preparation, general information on child-rearing and pregnancy	no services for deaf, deaf must provide own interpreter
Hospitals and ental Services	Howard University Hospital	medical, surgical and emergency services	hospital provides interpreter
	Howard County General Hospital	medical , surgical and emergency services	hospital provides interpreter, no specialized personnel
	Greater Southeast Community Hospital	medical, surgical psychiatric obstetric and emergency services	no specialized workers, hospital provides interpreter
	Greater Baltimore Medical Center	emergency, in-patient and out-patient services	social service worker trained in sign language and deafness on call 24 hrs/day
	Good Samaritan Hospital	special medical, surgical and rehabilitation services	no specialized workers, deaf must provide interpreter
	University of Maryland Hospital	medical, surgical and emergency services	provide volunteer interpreters, no specialized staff
	St. Elizabeth's Hospital	comprehensive mental health services.	specialized workers, staff members known sign, comprehensive mental health services for deaf
	Maryland State Mental Hygiene Administration	controls and directs all state facilities, licenses all public and private facilities	no specialized programs for deaf; no pressure placed on facilities to provide services for deaf

Appendix D
of
Final Report

Report 4: A Conference on Deafness for Community College Personnel

APPENDICES

Brochure . . . . Appendix A

Program. . . . . Appendix B

Letter of Invitation . . . . Appendix C

List of Handouts . . . . Appendix D

Instructions for Communication Workshop Group Leaders. . . Appendix E

Keynote Address. . . . . Appendix F

Evaluation Summary . . . . Appendix G

Copy of Question Form. . . . . Appendix H

List of Participants . . . . Appendix I

Conference on Deafness

In order to plan for a program for deaf students, community colleges need to have some knowledge about the handicap and its implications for service delivery in various programs. Obviously, it is not feasible to educate all of the staff of all community colleges before beginning to plan a program, but a core of knowledgeable personnel at each college will provide a basis for relating the needs of deaf people to the characteristics of the various institutions.

One of the project objectives was to conduct several deaf awareness conferences for community college personnel in Maryland. This objective was changed to one statewide conference to increase cost effectiveness and assure the availability of presenters. There was also a time consideration, since the conference(s) would have to take place before the end of the academic year.

Planning. Initial planning for the conference was done by Rebecca Morris (then a student at Western Maryland College), James S. Smith (Associate Dean for Occupational Training at Howard Community College), and the project coordinator.

Input was obtained from selected Howard Community College administrative staff regarding questions they had about serving deaf students. Rebecca Morris called several directors of programs for deaf students to ask, "If you could begin again, what would you want your host institution to know?". Based on advice given by these sources, a proposed program was designed and reviewed by the project advisory committee.

After some consideration, a location close to the college (the Loyola Conference Center) was chosen as the site for the conference, which was administered by Howard Community College's Office for Special Programs.

Since Columbia is centrally located in Maryland, it is a good location for statewide conferences. The registration fee was kept low to encourage maximum participation by the colleges. For $2, each participant received conference registration, lunch, coffee breaks, and a large packet of materials. A list of these materials is included in the Appendices.

Objectives. The objectives of the conference were:

1. To acquaint participants with the impact of deafness on communication and educational achievement.
2. To describe some of the characteristics of deaf people as a minority group.
3. To give some direct exposure of conference participants with one or more deaf individuals.
4. To describe support services necessary for successful integration of deaf students with normally hearing students in the classroom.
5. To identify potential funding sources for a program for deaf students.

Invitations and Attendance. Invitations and brochures were sent to several staff members from each community college. The participants were selected by James S. Smith according to their function in their respective community colleges. In general, the president, one or more instructional deans, a community service staff member, a dean of student services, and some faculty from each college were asked to attend. The procedure used was to send a letter of invitation to the college president for his college, with copies of the letter sent to staff members listed above. A few other interested people were invited also, but on the whole an effort was made to limit participation to those involved in community college education.

Registrations were very slow in coming in, possibly because of spring recess. Follow-up calls were necessary and proved effective. The final number of participants was seventy, including those assisting with the conference. Fifteen community colleges were represented.

Program. The morning's activities were devoted to a general orientation to the handicap and the afternoon sessions dealt with issues relevant to serving deaf students in Maryland's community colleges.

Following welcomes from various key people in the project, the keynote address was delivered by Dr. McCay Vernon, Professor of Psychology at Western Maryland College and Editor of the American Annals of the Deaf. He described the impact of deafness on education and communication, and related minority group dynamics to deaf people as a minority group.

A film, Swan Lake: Conversations with Deaf Teenagers, showed pre-college age deaf young people talking about their life goals, families, and attitudes about themselves as deaf individuals. Participants then had a coffee break, after which they divided into six small groups to discuss communication and other aspects of deafness. Each small group was led by both a deaf and a hearing professional who had been briefed in advance about the content of the small group sessions.

Demonstrations of the MCM (a portable teletype) before lunch were provided for those participants who were interested. Unfortunately, some interested people missed these demonstrations.

A buffet luncheon in the conference center followed.

The afternoon session consisted of two panels and concluding entertainment. The first panel, four staff members of the National Technical Institute for the Deaf, elaborated on the support team model of integrating deaf students in programs originally designed for hearing students. Panel members were:

Dr. William Hinkle, Director of Professional and Technical Programs; Mr. Tracy Hurwitz, Chairperson of the Support Services Department; Dr. Barry Culhane, Chairperson of General Education, and Mr. John Cox, a support team member.

Funding sources and issues were described by the second panel. Mr. Melvin Ladson discussed funds emanating from the Bureau of Education for the Handicapped as well as issues and trends in postsecondary education for handicapped persons. Ms. Glee Saunders, Educational Program Specialist, spoke about funding through the Office of Education's Division of Vocational Education. Educational support normally available from the Division of Vocational Rehabilitation was described by Mr. Edward Kilcullen, the state consultant for services to deaf clients.

Dr. Steve Millman of the Maryland State Board for Community Colleges described the community college system in Maryland and mentioned still another possible funding source: a charge back system for regional programs whose students come from out of county.

The final event of the day was a most enjoyable sign language presentation by Mary Beth Miller, a well known deaf actress, formerly a member of the National Theater of the Deaf and currently employed at New York University.

Evaluation. Evaluation forms were distributed at the close of the workshop. Thirty one evaluations were returned. As is the case with conferences, many of the participants had left before the end of the day, and some who were present did not fill out the evaluations. A copy of the evaluation form showing a summary of responses is included in the appendices of this report. Generally, reactions to the conference were very favorable. According to the responses, the conference objectives were met. Several constructive suggestions were made and these will be incorporated into later workshops for postsecondary programs which accept the challenge of serving deaf students.

Follow-Up. Short forms entitled, "Do You Have More Questions?" were distributed. These forms enabled participants to leave their specific questions with the project coordinator for an individual response. In addition, a follow-up mailing to each participant will include a list of participants, and copies of the Needs Assessment Report for those who requested one.

APPENDIX A

BROCHURE

THE SILENT MINORITY

DIRECTIONS TO LOYOLA CONFERENCE CENTER
5th FLOOR OF AMERICAN CITY BUILDING

From the Baltimore Metropolitan Area:
From Baltimore Beltway 695, take exit 16 West (Interstate 70N). Drive 7 miles and bear left (South) on US 29. Enter Columbia by the North entrance and continue on Little Patuxent Parkway to the American City Building, a white multi-story building with an overpass walking bridge, on the left.

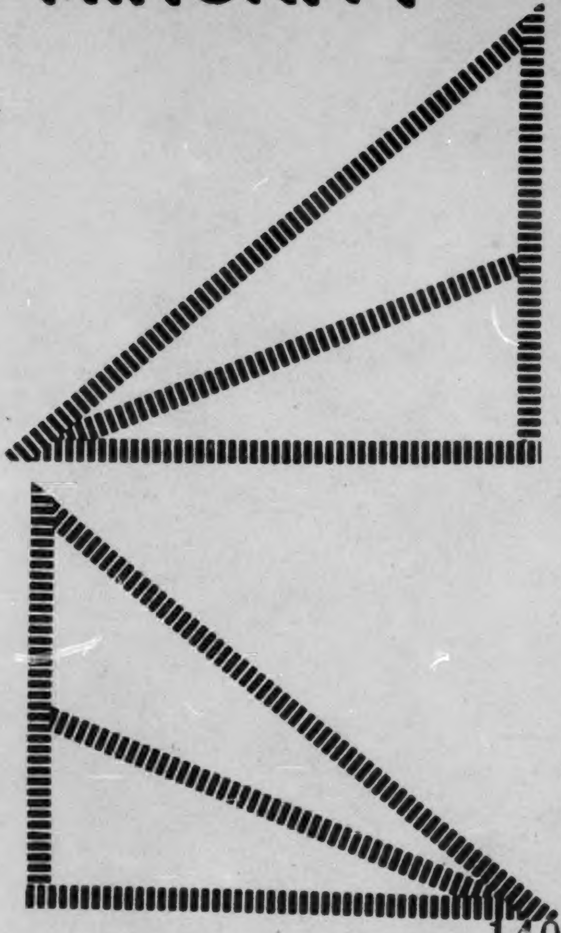
From the Washington, D. C. Metropolitan Area:
Follow I-95 or the Baltimore-Washington Parkway to Route 175 West. Continue on Route 175 into Columbia. The American City Building, a white multi-story building with an overpass walking bridge, will be on your left.

From Western Maryland:
Take US 70 to Route 29 South. Follow 29 to the North entrance to Columbia and continue on Little Patuxent Parkway to the American City Building, a white multi-story building with an overpass walking bridge, on the left.

From the Eastern Shore:
Take US 50 West to Route 2 North. Continue on Route 2 to the Junction of Route 100 toward Baltimore. Follow Route 100 to Route 3 North. Continue on Route 3 to 695-Baltimore Beltway North. Take exit 16 West (Interstate 70) and go 7 miles to Route 29 South. Follow 29 to the North entrance of Columbia. Follow Little Patuxent Parkway to the American City Building, a white multi-story building with an overpass walking bridge, on the left.

HOWARD COMMUNITY COLLEGE
Office of Special Programs
10901 Little Patuxent Parkway
Columbia, Maryland 21044

THE
SILENT
MINORITY



HOWARD COMMUNITY COLLEGE

REGISTRATION FORM

NAME ____________________

POSITION ____________________

COLLEGE OR OTHER AGENCY ____________________

ADDRESS ____________________

PHONE NO. ____________________

Deadline for Registration: April 12, 1977

Please return this form with a $2 Registration Fee to:

Office of Special Programs
Howard Community College
10901 Little Patuxent Parkway
Columbia, Maryland 21044

Thank you very much!

THE SILENT MINORITY

Tuesday, April 19, 1977
Loyola Conference Center
5th Floor, American City Building
Columbia, Maryland
Registration: $2
(Includes coffee breaks, lunch, registration and materials)

This one day workshop is designed to provide a basic orientation to the handicap of deafness and its implications for community colleges' credit programs. The information given will also be useful for community service personnel.

Funded by the Division of Vocational Technical Education, Maryland State Department of Education, and administered by Howard Community College, *The Silent Minority* is part of a statewide feasibility study of postsecondary education for deaf people. At present there is no community college program for deaf people in Maryland, and consequently these individuals cannot acquire occupational training without leaving the state. Before this situation can change, it is necessary for key staff members of these colleges to be aware of how they can best serve deaf clients.

PROGRAM

8:30 - 9:00	Registration (Coffee)
9:00 - 9:20	Welcomes *Mr. Jim Smith, Associate Dean for Career Programs, Howard Community College* *Dr. Alfred Smith, President, Howard Community College* *Mrs. Ruth Brown, Staff Specialist, Division of Vocational Technical Education*
9:20 - 9:30	Introduction of Keynote Speaker *Mr. Sheldon Greenberg, Project Director, Lilly Foundation Grant*
9:30 - 10:15	Keynote Speaker *Dr. McCay Vernon, Professor of Psychology, Western Maryland College*
10:15 - 10:30	Film – *Swan Lake: Conversations with Deaf Teenagers*
10:30 - 10:45	Break (Coffee and Pastry)
10:45 - 11:45	Communication Workshops (small group sessions)
12:00 - 1:00	Lunch
1:00 - 2:00	Panel – Support Services Necessary for Deaf Students in a Community College *Dr. Milo Bishop, Assistant Dean of Career Programs, and Staff of the National Technical Institute for the Deaf, Rochester, New York*
2:00 - 2:30	Funding Issues *Mr. Melvin Ladson, Bureau of Education of the Handicapped, United States Office of Education*
2:30 - 3:00	The Community College's Role in Serving Handicapped People *Dr. Steve Millman, Maryland State Board for Community Colleges*
3:00 - 3:30	Sign Language Entertainment
3:30 - 3:45	Wrap-up and Evaluation

HOWARD COMMUNITY COLLEGE
BOARD OF TRUSTEES

Dr. John W. Sundstrom, Chairman
Dr. Charles B. Leonard, Vice Chairman
Mr. Frederick K. Schoenbrodt
Mrs. Gloria Herrera
Dr. John Hamilton
Mr. Andrew N. Adams, Jr.
Mrs. Leola M. Dorsey
Dr. Alfred J. Smith, Jr., Secretary-Treasurer

APPENIDX B

PROGRAM

THE SILENT MINORITY

PROJECT ADVISORY COMMITTEE

Ruth Brown
Frank Bryan
Norma Buemi
Lillian Clark
Edward E. Corbett, Jr.
Dr. David M. Denton
Joseph P. DeSantis
Dr. Roland G. Frank
Gertrude S. Galloway
Bernice Hoeper
Edward T. Kilcullen
Dr. Leonard P. Siger
James S. Smith
Jackie Stover
Dr. McCay Vernon
Judith R. Williamson
Anne Marie Zalewski

HOWARD COMMUNITY COLLEGE

BOARD OF TRUSTEES

Dr. John W. Sundstrom, Chairman
Dr. Charles B. Leonard, Vice Chairman
Mr. Frederick K. Schoenbrodt
Mrs. Gloria Herrera
Dr. John Hamilton
Mr. Andrew N. Adams, Jr.
Mrs. Leola M. Dorsey
Dr. Alfred J. Smith, Secretary-Treasurer

THE SILENT MINORITY

An Orientation to the Handicap of Deafness for Community College Personnel

Tuesday, April 19, 1977

Loyola Conference Center
American City Building
Columbia, Maryland 21044

Sponsored by Howard Community College
with funds from the Division of Vocational Technical
Education, Maryland State Department of Education

COMMUNICATION WORKSHOPS

WORKSHOP LEADERS	ROOM
George Shellem, Director of Career Education, Maryland School for the Deaf Norma Buemi, Counselor, Division of Vocational Rehabilitation	1
Frank Bryan, Principal Maryland School for the Deaf, Columbia Campus Gertrude Galloway, Assistant Principal Maryland School for the Deaf, Columbia Campus	2
Debbie Clark, Total Communication Coordinator, Maryland School for the Deaf Bernice Hoeper, Director of Deaf Community Services, Lutheran Mission Society of Maryland	5
Paula Ottinger, Director of After-School Programs, Maryland School for the Deaf, Columbia Campus Jackie Stover, Liaison Worker, Baltimore City Public Schools	5A
Janet Merrick, Counselor, Division of Vocational Rehabilitation Don Pettingill, Logistics Specialist, White House Conference on Handicapped Individuals	6
Judy Athey, Project Coordinator, Howard Community College Holly Roth, Student, Howard Community College	7

INTERPRETERS

Debbie Clark
Paula Ottinger
Judy Athey

PROGRAM

8:30 - 9:00	Registration (Coffee)
9:00 - 9:30	Welcomes James S. Smith, Associate Dean of Career Programs, Howard Community College Dr. Alfred Smith, President, Howard Community College Mrs. Ruth Brown, Staff Specialist, Division of Vocational Technical Education Introduction of Keynote Speaker Sheldon Greenberg, Project Director, Lilly Foundation Grant
9:30 - 10:15	Keynote Speaker Dr. McCay Vernon, Professor of Psychology, Western Maryland College and Editor, *American Annals of the Deaf*
10:15 - 10:30	Film – *Swan Lake: Conversations with Deaf Teenagers*
10:30 - 10:45	Break (Coffee and Pastry)
10:45 - 11:45	Communication Workshops (small group sessions)
12:00 - 1:00	Lunch
1:00 - 2:00	Panel – Support Services Necessary for Deaf Students in a Community College Dr. William Hinkle, Director of Division of Technical and Professional Education, and staff of the National Technical Institute for the Deaf, Rochester, New York
2:00 - 2:30	Funding Issues Melvin Ladson, Program Coordinator, Bureau for the Handicapped, United States Office of Education
2:30 - 3:00	The Community College's Role in Serving Handicapped People Dr. Steve Millman, Assistant Executive Director, Maryland State Board for Community Colleges
3:00 - 3:30	Sign Language Entertainment Mary Beth Miller, New York University
3:30 - 3:45	Wrap-up and Evaluation

APPENDIX C

LETTER OF INVITATION

THE SILENT MINORITY

howard community college

Columbia, Maryland 21044
1-301-~~730-8000~~
992-4837

March 14, 1977

Dear Dr. ______________:

On April 19, 1977, Howard Community College will sponsor a one-day conference on deafness for staff members of Maryland's community colleges. The conference is part of a statewide study of the feasibility of opening community college credit programs to deaf citizens.

The goals of the conference are: 1) to give participants an increased awareness of the implications of deafness for communication and education; 2) to inform participants about how deaf students can be integrated into classes initially designed for hearing students; 3) to expose participants to deaf individuals and sign language; and 4) to give basic information on funding and civil rights issues.

We are very interested in having the participation of ______________ Community College at the Conference. We hope you will attend, and we have taken the liberty of specifying the administrative staff members we would like to attend. As an invitation, a copy of this correspondence and the enclosed brochure are being sent to the individuals listed below. In addition, we are asking the Dean of Instruction to select two faculty members to participate.

The registration fee of $2 covers lunch, a coffee break, and conference materials. We have kept the fee as low as possible to encourage maximum participation.

Handicapped people are our most recently recognized minority group; civil rights provisions in the Rehabilitation Act of 1973 have implications for institutions of higher education. Please take advantage of this opportunity to learn how deaf people can be served by community colleges.

Sincerely,

Judy Athey, Project Coordinator
Feasibility Study of
Postsecondary Education for
Deaf Students

JA/jh
Enclosure

APPENDIX D

LIST OF HANDOUTS

THE SILENT MINORITY

LIST OF HANDOUTS

The Silent Minority: A Conference on
Deafness for Community College Personnel in Maryland

1. Welcome to the Quiet Life: An Orientation Manual for Teachers (and Trainers of Teachers) of Deaf Adults, by Robert A. Luke
2. Stuck for the Right Word?
3. Deafness Briefs: Information on Deaf Adults
4. You and Your Deafness
5. A Look At American Sign Language
6. A Look At Finger Spelling
7. Principles Basic to the Establishment and Operation of Postsecondary Programs for Deaf Students; Conference of Executives of American Schools for the Deaf, June, 1973. Editor, E. Ross Stuckless, Ph.D.
8. Listing of Sign Classes in Maryland
9. Sign Charts (ABC Cards)

NOTE: Handbook #1 may be obtained from the Center for Continuing Education, Gallaudet College, Washington, D.C.

Booklets #2 thru #6 may be obtained from the Public Service Programs, Gallaudet College, Washington, D.C.

Publication #7 may be obtained from the Conference of Executives of American Schools for the Deaf, National Office, Washington, D.C.

APPENDIX E

INSTRUCTIONS FOR COMMUNICATION WORKSHOP GROUP LEADERS

Communication Workshops - Instructions for Group Leaders
Deaf Awareness Conference - April 19, 1977

The purpose of the one hour, small group communication workshops is to give a general orientation to the implications of hearing loss in communication. Each workshop will be conducted by two leaders: one deaf or hard-of-hearing, and one hearing.

In discussing the topics, leaders should keep the tone informal, and share responsibility for instructing the group. Deaf leaders may want to draw on personal experiences to give the presentations some color. Hearing leaders will interpret questions from the audience (which should number from 15 to 30 participants per group) for his or her deaf partner. If necessary, the hearing leader will reverse interpret for the deaf leader. All workshop leaders should use total communication while addressing the group.

Leaders should emphasize the abilities rather than disabilities of deaf people. However, it would be misleading to gloss over the implications of hearing loss in reading and writing skills. Try to give a balanced picture and stimulate discussion.

Topics to be covered:

1) What hearing loss sounds like: tape recording
2) An unfair hearing test: tape recording
3) Profound deafness: impact on
    a) speech
    b) language development
    c) reading
    d) writing
4) Preferred communication methods
    a) misconceptions about and problems with lipreading
    b) sign language
    c) fingerspelling
    d) note-writing
5) Question and answer, discussion

Granted, you could teach an entire course on these topics. However, certain basic facts familiar to all of us can be presented in one hour. There is a fifteen minute lag between the end of the session and the beginning of the lunch hour, so if you run overtime, don't sweat it. If your group is a dud and you finish early, you can always teach them the ABC's.

APPENDIX F

KEYNOTE ADDRESS

COMMUNITY COLLEGES AND DEAFNESS

BY McCAY VERNON, Ph.D.

Community Colleges and Deafness

by McCay Vernon, Ph.D.

(Keynote Address at The Silent Minority; a conference on deafness
for Maryland's community college personnel, April 19, 1977)

This meeting represents a national and historic first for community colleges and for the field of deafness. It is the first time ever that the community colleges of an entire state have come together as a group to examine the needs of the deaf population. It is a tremendous credit to Maryland Community Colleges in general; to Dr. Alfred Smith, President, and Mr. James Smith, Associate Dean of Howard Community College, and to Ms. Judy Athey, Mrs. Ruth Brown, and Mr. Sheldon Greenberg who have been directly involved in the planning for serving deaf people in community colleges that has brought us here today. Other states may be ahead of Maryland in that some have individual isolated community college programs for deaf students, but Maryland is the first state to go about the development of services in its community college system in a carefully planned and organized way.

There is a certain irony to the fact that the field of deafness and the community college movement have not had a closer relationship over the years because the major need of deaf youth and adults for career preparation is postsecondary training at levels below that of the four year college. Although only 9.4 percent of deaf people ever graduate from college, a hugely disproportionate amount of State Division of Vocational Rehabilitation client services money is devoted to these few. Likewise comparatively huge Federal sums have been committed to the construction and operation of four year colleges and college programs, whereas, government investment and training facilities for the other 90 percent of deaf people are meagre. This is not intended as a criticism of the Division of Vocational Rehabilitation because there have been few educational programs to enable DVR to invest its money more effectively. Nor is it an objection to four year colleges.

The need of deaf people for community college services becomes even more evident if we look at the nature of the deaf population. Let's make this examination in terms of three key variables or characteristics.

Some Major Traits of Deaf People

Intelligence. Intelligence is normally distributed among the deaf population. Proportionately there are just as many deaf geniuses as there are retarded persons. In fact, genetically deaf people have higher than normal intelligence. Their mean I.Q. is 110. (Brill, 1962).

The implications of deafness for community colleges then are very positive. Most deaf people have the intelligence to benefit from the programs they have to offer.

Education. However, the overall educational picture is not so encouraging. Although there are some deaf professionals and Ph.D.'s, these are relatively few. As an example of a deaf professional we have with us today a very talented deaf professional actress, Ms. Mary Beth Miller, who will be entertaining you later. However, only some 5% of deaf youth who leave school at age 16 or older have a 10th grade educational achievement level. Some 60% are grade level 5.3 or below and 30% are functionally illiterate. Low overall reading comprehension scores are the most difficult aspect of the basic problem.

Implications

There are three major implications for community colleges. One is that it will be the terminal technical-vocational aspects of their programs which will benefit deaf people most, not the academic curricula geared to prepare students to move on into four year colleges.

A second implication is that remedial and supportive services will be needed if deaf students are to be successful.

Third, community colleges must ask themselves the very tough question of how low an educational level of deaf student they can serve effectively in their vocational-technical programs. This is the "bottom line" question in so far as deaf people are concerned, because it is a major determiner of the percent of deaf people who will be able to benefit from community colleges.

Communication

Let's back up a bit and ask the question, "If the deaf population has a normally distributed I.Q., why do they do so poorly in terms of academic achievement levels?" The reason is lack of communication. The communication problem is at the very heart and essence of the handicapping dimension of deafness. It is sole reason that deaf students coming to a community college would need highly specialized services. Therefore, we will take a careful overview of five fundamental aspects of communication.

Reading and Writing. First there is the reading and writing dimension. To deaf people, English is a foreign language. Many of us have struggled for years to learn a foreign language without ever really mastering it. Sometimes people ask, "Why don't deaf people read?" They don't read for the same reasons that you and I do not pick up a book in French or Russian for our leisure reading. We do not know these languages well enough to make reading satisfying.

Speech. A second dimension is speech. The person born deaf never develops normal speech. My wife is deaf. If you are used to her speech, you may be able to understand her. However, if you were not used to her speech, communication would be very difficult. The problem is that deaf people can't hear themselves speak. Thus they cannot monitor their speech. For example, a deaf person in a noisy restaurant has no way of knowing if he's talking loud enough to be heard.

I have a southern accent, and I can't help it; I would much prefer that my speech would make you think I am from Harvard. If I, despite my normal hearing, can't change my speech, how can we expect a deaf person to speak normally?

Lipreading. Lipreading is another dimension of communication. Most deaf people comprehend only 5% of communication through lipreading alone. Research shows that even the best lipreaders get only 26% of what is said through lipreading, and these are hearing people. Why is it that hearing people lipread better than deaf people who have had years of training? Hearing people learn lipreading by conditioning, associating the sound of the word with the lip movement. Deaf people do not have the same advantage.

A major problem with lipreading is that 40-60% of the sounds of English look the same on the lips. The sounds 'b' and 'p' look alike on the lips; 'd' and 't' look alike; "I love you" and "I'll have a few" look alike (you can get into a lot of trouble that way).

There are a few deaf people who are very proficient in speech and lipreading just as Jascha Heifetz is very proficient on the violin. Without taking anything away from Mr. Heifetz, we cannot expect every child who has violin lessons to grow up to be a virtuoso. The same principle applies to deaf children.

Sign language. A fourth aspect of communication for deaf people is sign language. Sign language does not have the same word order that English has, just as French and German have different word orders from English.

Fingerspelling. A final dimension of communication is fingerspelling. In fingerspelling, each letter of the alphabet can be represented on the hand. Fingerspelling is like writing in the air.

Given these 5 dimensions of communication for deaf people what are the implications for community colleges? The communication problem and the overall educational level of deaf students means that if these students are to be served in a community college there must be a support system for them which would consist of

Interpreters: The function of the interpreter is to translate the lecture and discussion in a classroom into sign language. Interpreters must be present in every class if the deaf student needs one.

Notetakers: Because deaf students must get all instructional information through vision, they cannot take notes. When they look down to write, they miss what is said in the meantime. Therefore, someone in the class must take notes for deaf students.

Tutors: Tutors help deaf students overcome the educational and linguistic problems encountered in academic coursework.

Other staff may include counselors trained to work with deaf people and instructors to teach special classes and sign language classes.

Thus far we have looked at three major characteristics of the deaf population, intelligence, educational level, and communication. Their implications for community colleges have been considered.

Training Areas

Next let's take a cursory look at occupations which are appropriate for deaf people which also meet the following criteria:

1. They require training.
2. The training they require is of a type that can be provided by community colleges.
3. The occupations involved do not require hearing, as a telephone operator or piano tuner.
4. The occupations are those for which demand is increasing over the next ten year period.

The suggested training areas to be discussed are not intended to limit deaf people or stereotype them into a few programs or jobs. The occupations which deaf people can master are virtually limitless. The suggested areas which follow are merely an attempt to put some logic into where money is spent.

A major area is office work including clerks, bookeepers, office machine operators, computer key punchers and computer operators.

- Another area is construction trades such as bricklayer, carpenter, elevator mechanics, lathers, joiners, and ironworkers.
- A third occupational category is the scientific technical area. Examples are surveyor, electornic technician, and weather technician.
- Mechanics and repairers are another appropriate occupational area. Refrigeration mechanics, auto mechanics, watch and jewelry repair persons are examples in this field.
- Health occupations are a fifth category. Dental assistant, EKG technician and tissue technician are examples in this fast growing field.

The Silent Minority

Having taken a cursory look at some major characteristics of deaf people and at some occupational areas appropriate for community colleges and for deaf students, let's consider the theme of this conference which is "The Silent Minority". Let us consider deaf people as a minority group. This perspective is fascinating because when we apply principles of minority group dynamics to deaf people some remarkable insights result.

Consider the characteristics of successful minority groups as opposed to unsuccessful minority groups. Mormons, Jews, and Chinese-Americans represent successful minorities. In education, these people either place themselves in influential positions or provide their own schools to assure the kind of education they want. They have more years of education per person than the Caucasian majority.

Deaf people are in the same situation as other unsuccessful minorities. Traditionally, hearing people have made decisions regarding the education of deaf people. The feasibility study in deafness has not repeated this mistake. The advisory committee to the project consists of deaf persons, parents of deaf children, and others.

Summary

To summarize, some 90% of the deaf population is now in need of vocational-technical type education and training. Of this 90% perhaps 30% lack the educational background for community college work. This leaves upwards of 60% of deaf people in need of the kinds of programs community colleges offer. Were the deaf not such a silent minority they would have long ago been served by community colleges. Then this historical meeting would have occurred a decade ago, instead of today.

Quality programs for deaf people will not be cheap but properly conceived and implemented they will not be an expense to the state of Maryland but instead, will represent an investment in the most precious resource the state has --- its people.

Dr. Vernon is a professor of psychology at Western Maryland College, Editor of the American Annals of the Deaf, and a prolific author of articles and books on deafness. He has been internationally recognized through numerous awards for his work as an advocate of deaf people.

APPENDIX G

EVALUATION SUMMARY

THE SILENT MINORITY

The Silent Minority
Conference on Deafness for Community College Personnel
Evaluation

(Participants who had extensive knowledge prior to the workshop were not included in the summary of the first two items)

1. Please rate your general knowledge about the handicap of deafness prior to the conference.

No Knowledge 1 2 ○ 3 4 5 6 7 Extensive Knowledge

2. Please rate your general knowledge about the handicap of deafness after having attended the conference.

No Knowledge 1 2 3 4 ○ 5 6 7 Extensive Knowledge

3. As a result of the conference, how would you rate your understanding of the following:

Deaf people as a minority group	No Understanding	1	2	3	4	5	[✓ 6]	7	Much Greater Understanding
The impact of deafness on oral communication	No Understanding	1	2	3	4	5	[✓ 6]	7	Much Greater Understanding
The impact of deafness on reading and writing	No Understanding	1	2	3	4	5	[✓ 6]	7	Much Greater Understanding
Methods of communication used by deaf individuals (sign language, finger-spelling, speech, lipreading, writing, etc.)	No Understanding	1	2	3	4	5	[✓ 6]	7	Much Greater Understanding
Methods used by deaf people to communicate by telephone	No Understanding	1	2	3	4	[✓ 5]	6	7	Much Greater Understanding
Support services which enable community colleges and other postsecondary programs to serve deaf students integrated into the hearing classroom	No Understanding	1	2	3	4	5	[✓ 6]	7	Much Greater Understanding
Possible funding sources for a program for deaf students	No Understanding	1	2	3	4	[✓ 5]	6	7	Much Greater Understanding

4. The physical accomodations were: (28)Excellent (3)Good ( )Fair ( )Poor

5. The most valuable portion of the program was:

See attached sheet

6. The least valuable portion of the program was:

See attached sheet

7. Other Comments:

See attached sheet

APPENDIX H

COPY OF QUESTION FORM

THE SILENT MINORITY

The Silent Minority
Conference on Deafness for Community College Personnel
Evaluation

Evaluation of items 5, 6, and 7.

5. The most valuable portion of the program was:

   Entertainment; communication workshops; excellent attitude and open discussion; meeting NTID faculty; keynote speaker; funding issues; excellent program from beginning to end; introduction and welcomes; all were equally valuable; entire program; diversity of content and speakers

6. The least valuable portion of the program was:

   Well done, can't say; all valuable; funding panel; State and Federal officials; NTID presentation was repetitive but valuable; NTID presentation too lengthy; TTY not demonstrated to all

7. Other comments:

   Well done; learned a lot; enjoyed entertainment; liked to have heard from deaf students being serviced by vo-tech programs in community colleges; do theories of pedagogy and andragony apply to deaf as they do to hearing?; excellent program; rewarding day; planning and execution of meeting was excellent; would have enjoyed more interaction and information exchange among participants; would have been better to have a moderately active activity after lunch; can participants addresses be circulated?; smoothest running, well organized conference ever attended; perhaps deaf person on program with McCay Vernon; appreciate elimination of interpreting for speakers who know how to sign

APPENDIX I

LIST OF CONFERENCE PARTICIPANTS

THE SILENT MINORITY

DO YOU HAVE MORE QUESTIONS?

The topics covered in The Silent Minority may have raised unanswered questions in your mind. If you have questions about deafness or about serving deaf students in a postsecondary program, please note them below and leave your name, address, and phone number. I will be happy to discuss them with you.

Thank you for attending The Silent Minority.

Judy Athey
Project Coordinator

Questions: ____

____

____

____

Name: ________________________________

Address: ________________________________

____

Phone: ____________________

The Silent Minority
CONFERENCE PARTICIPANTS

Cathy Abernathy	Intern, Counseling Center University of Maryland College Park, Maryland 20742
Judy Athey	Project Coordinator, Feasibility Study of Postsecondary Education for Deaf Students Howard Community College Columbia, Maryland 21044
Daniel E. Bock	Counselor Hagerstown Junior College 751 Robinwood Drive Hagerstown, Maryland 21740
Marion Bonaparte	Assistant of the Dean of Faculty Community College of Baltimore Lombard Street at Market Place Baltimore, Maryland 21202
Ruth C. Brown	Maryland State Department of Education P.O. Box 8717 Baltimore-Washington Airport Baltimore, Maryland 21240
Frank Bryan	Principal Maryland School for the Deaf Columbia Campus Rt. 175 and Old Montgomery Road Columbia, Maryland 21045
Norma Buemi	Rehabilitation Counselor for the Deaf Division of Vocational Rehabilitation Room 306 5809 Annapolis Road Bladensburg, Maryland 20710
Paul R. Cerar	Assistant Dean for Continuing Education Harford Community College 401 Thomas Run Road Bel Air, Maryland 21017
Debbie Clark	Maryland School for the Deaf 101 Clarke Place Frederick, Maryland 21701
Lillian H. Clark	Advisory Committee, Feasibility Study of Postsecondary Education for Deaf Students Clarkland Farms Route 108 Ellicott City, Maryland 21043

John Cox	Support Team - Applied Arts National Technical Institute for the Deaf 1 Lomb Memorial Drive Rochester, New York 14623
Barry Culhane	Chairperson, General Education Support Team National Technical Institute for the Deaf 1 Lomb Memorial Drive Rochester, New York 14623
Malcolm Davies	Director, Engineering and Marine Technology Community College of Baltimore Lombard Street at Market Place Baltimore, Maryland 21202
Herm Davis	Director, Student Financial Aids Rockville Campus Montgomery Community College Rockville, Maryland 20850
Joseph T. Doyle	Associate Dean of Students Takoma Park Campus Montgomery Community College Takoma Park, Maryland 20012
Toby Epstein	Mainstreaming Facilitator for the Deaf Baltimore City Public Schools 2921 Stranden Road Randallstown, Maryland 21133
Roland G. Frank	Director, Community Education Development Office 207 College Hall Gallaudet College 7th and Florida Avenue, N.E. Washington, D.C. 20002
Jack W. Friedman	Assistant Dean of Faculty Community College of Baltimore Lombard Street at Market Place Baltimore, Maryland 21202
Gertrude Galloway	Vice Principal Maryland School for the Deaf Columbia Campus Rt. 175 and Old Montgomery Road Columbia, Maryland 21045

Emanuel Golden	Liaison Associate Baltimore City Public Schools Division of Exceptional Children 2300 North Calvert Street Baltimore, Maryland 21218
Sheldon Greenberg	Howard County Police Department 3410 Court House Drive Ellicott City, Maryland 21043
Lynne Harrison	Counselor Rockville Campus Montgomery Community College Rockville, Maryland 20850
Celeste Herse	Maryland School for the Deaf 101 Clarke Place Frederick, Maryland 21701
William Hinkle	Director of Professional and Technical Programs National Technical Institute for the Deaf 1 Lomb Memorial Drive Rochester, New York 14623
Bernice Hoeper	Director Deaf Community Services Lutheran Mission Society of Maryland 1201 South Charles Street Baltimore, Maryland 21230
Maureen Hoeppel	Instructor-Test Center Howard Community College Columbia, Maryland 21044
Murray K. Hoy	Admissions Officer & Registrar Chesapeake College Wye Mills, Maryland 21679
Tracy Hurwitz	Chairman, Support Services Department National Technical Institute for the Deaf 1 Lomb Memorial Drive Rochester, New York 14623
Edward T. Kilcullen	Maryland State Department of Education Division of Vocational Rehabilitation P.O. Box 8717 Baltimore-Washington Airport Baltimore, Maryland 21240
Nancy Krupnick	Vocational Rehabilitation Counselor 255 North Washington Street #405 Rockville, Maryland 20850

Kenneth L. Kuester	Supervisor of Field Services Maryland Division of Vocational Rehabilitation P.O. Box 8717 Baltimore-Washington Airport Baltimore, Maryland 21240
Melvin Ladson	Bureau of Education for the Handicapped Room 3121 Donohoe Building 400 Maryland Avenue, S.W. Washington, D.C. 20202
Nancy Lawhon	Coordinator - Single Step Program for Handicapped Adults Dundalk Community College 7200 Sollers Point Road Baltimore, Maryland 21222
Sister Helen Lawrence	Dean Villa Julie College Greenspring Valley Road Stevenson, Maryland 21153
Debbie London	Director of Dance Program Community College of Baltimore 2901 Liberty Heights Avenue Baltimore, Maryland 21215
Linda McCagh	Counselor Allegany Community College Cumberland, Maryland 21502
Janet Merrick	Vocational Rehabilitation Counselor Maryland School for the Deaf 101 Clarke Place Frederick, Maryland 21701
Mary Beth Miller	New York University Deafness Research and Training Center 80 Washington Square, East New York, New York 10003
Steve Millman	Assistant Executive Director Maryland State Board for Community Colleges The Jeffrey Building 16 Francis Street Annapolis, Maryland 21401
Christine Moore	Dean, Student Services Community College of Baltimore Lombard Street at Market Place Baltimore, Maryland 21202

Rebecca Morris	Box 874 Western Maryland College Westminster, Maryland 21157
Jim Morrison	Student Development Division Frederick Community College Frederick, Maryland 21701
Don Moss, M.D.	Director, Mental Health Clinic University Health Service University of Maryland College Park, Maryland 20742
William E. Muller	Instructor of Reading Hagerstown Junior College 751 Robinwood Drive Hagerstown, Maryland 21740
James Murtha	Chairman, Student Development Division Harford Community College Bel Air, Maryland 21041
Paula Ottinger	Director of After-School Programs Maryland School for the Deaf Columbia Campus Rt. 175 and Old Montgomery Road Columbia, Maryland 21045
Don Pettingill	Logistics Specialist White House Conference on Handicapped Individuals 1832 M Street Suite 801 Washington, D.C. 20036
Bill Philipp	Coordinator, Programs for Special Populations Division of Continuing Education Catonsville Community College 800 South Rolling Road Baltimore, Maryland 21228
Donna L. Poorman	Interim Coordinator for Continuing Education Chesapeake College Wye Mills, Maryland 21679
Charles W. Reinhardt, II	Director, Division of Social Services and Public Services Community College of Baltimore Lombard Street at Market Place Baltimore, Maryland 21202

James R. Rojahn	Chairman, Human Development Division Essex Community College Baltimore, Maryland 21237
Holly Roth	9270 K Livery Lane Laurel, Maryland 20810
Glee Saunders	United States Office of Education/BOAE Room 5110 ROB #3 7th and D Streets, S.W. Washington, D.C. 20202
Christine Sawyer	Coordinator, Career Placement Howard Community College Columbia, Maryland 21044
Thomas D. Sepe	Harford Community College 401 Thomas Run Road Bel Air, Maryland 21014
W.A. Seth	Student Personnel Division Chesapeake College Wye Mills, Maryland 21679
George Shellem	Career Education Coordinator Maryland School for the Deaf 101 Clarke Place Frederick, Maryland 21701
David Shore	Associate Dean - Instructional Development Prince George's Community College Largo, Maryland 20870
Leonard Siger	Division of Exceptional Children Department of Education 2300 North Calvert Street Baltimore, Maryland 21207
Sandra Siger	Teacher - Baltimore City Public Schools 5225 Brook Way Columbia, Maryland 21044
Alfred Smith	President Howard Community College Columbia, Maryland 21044
James S. Smith	Associate Dean of Career Programs Howard Community College Columbia, Maryland 21044
Jackie Stover	Liaison Worker for the Deaf Baltimore City Public Schools 8233 Sherbrooke Court Millersville, Maryland 21108

Gerald Teague	Supervisor, Bureau of Educational Research College of Education University of Maryland College Park, Maryland 20742
Richard M. Turner, III	Dean of Faculty, Harbor Campus Community College of Baltimore Lombard Street at Market Place Baltimore, Maryland 21202
John Van Brunt	Assistant Director Counseling Center University of Maryland College Park, Maryland 20742
McCay Vernon	Professor of Psychology Western Maryland College Westminster, Maryland 21157
Beverly Wilcox	Learning Counselor Allegany Community College Cumberland, Maryland 21502
Ann Marie Zalewski	Cluster Chairperson, Learning Lab. Howard Community College Columbia, Maryland 21044

Appendix E
of
Final Report

Report 5: How They Do It: Existing Postsecondary Programs for Deaf Students and Implications for a Program in Maryland

ACKNOWLEDGEMENTS

In addition to the Project Advisory Committee, the following individuals assisted with this report:

Joan Glance Fernandes, Director
Service Center for Opportunities to
Overcome Problems
Tarrant County Junior College District
Hurst, Texas

Elizabeth (Buffy) Fetter, Coordinator
Services for Handicapped Students
Eastfield College
Mesquite, Texas

James Largerstrom, Director
Special Services
Los Angeles Pierce College
Woodland Hills, California

Robert Lauritsen, Director
Roger Reddan, Counselor
Patrick Duggan, Counselor
St. Paul Technical-Vocational Institute
St. Paul, Minnesota

John LeBlond, Director
Career Programs for the Deaf
Northwestern Connecticut Community College
Winsted, Connecticut

William May, Director
Program for Deaf Students
Riverside City College
Riverside, California

Dr. Lucille Miller
Hearing Impaired Program
Pasadena City College
Pasadena, California

Brenda Rawlings
Office of Demographic Studies
Gallaudet College
Washington, D.C.

Aram Terzian, Director
Joan McLaughlin, Lead Interpreter
Ned Bachus, Counselor
Community College of Philadelphia
Philadelphia, Pennsylvania

Judy Tingley, Director
Program for Deaf Students
American River College
Sacramento, California

Jean VanKeuren, Counselor
James Oster, Instructor
Sharla Dunn, Instructor
Program for the Deaf
Valley Vocational Center
City of Industry, California

Dr. Gino Vescovi, Acting Director
Hearing Impaired Program
Golden West College
Huntington Beach, California

TABLE OF CONTENTS

Acknowledgements i

List of Appendices ii

Introduction 1

Method 3

Results and Their Implications for Maryland 6

- Students-Enrollment 7
- Support Services 15
- Administration 26
- Some Students' Opinions 37
- Interviews with Administrators 39

Conclusion: Major Issues 41

References 44

APPENDICES

Descriptions of Basic Support Services from Principles Basic to the Establishment and Operation of Postsecondary Education for Deaf Students by the Conference of Executives of American Schools for the Deaf, 1973 . . . . Appendix A

Information on Programs Visited from A Guide to College/Career Programs for Deaf Students . . . . Appendix B

Forms and Other In-House Documents . . . . Appendix C

Feasibility Study Project Advisory Committee . . . . Appendix D

POSTSECONDARY PROGRAMS

One of the crucial questions in determining the feasibility of a postsecondary program for deaf students is, how is this type of program implemented elsewhere? Answers to this question become especially important when the program under study is not being duplicated nearby and is unfamiliar to those who must decide whether or not to implement it. Postsecondary programs for deaf students below the baccalaureate level are a new idea in Maryland and merit in-depth study.

The trend toward integrating deaf students into regular community college programs has grown rapidly in recent years. The oldest program of this kind is 16 years old. Over half of the nation's postsecondary programs for deaf students were initiated since 1970 (Rawlings and Trybus, 1976).

The most comprehensive publication describing most of these programs is A Guide to College/Career Programs for Deaf Students, produced as a public service by Gallaudet College and the National Technical Institute for the Deaf (1975). In addition, a 1976 article by Rawlings and Trybus summarizes the information in the Guide.

Programs listed in the Guide meet the following criteria. All of the programs:

(1) Have a minimum of ten full-time students;

(2) Have a full-time director or a part-time director who devotes a minimum of 50% of his time to the deaf program;

(3) Accept students directly from high school;

(4) Are part of an accredited postsecondary program;

(5) Generally comply with the Principles Basic to the Establishment and Operation of Postsecondary Education for Deaf Students of the Conference of Executives of American Schools for the Deaf (CEASD).

In accordance with these criteria, the programs are not limited to community colleges, but include four year colleges and universities as well as technical-vocational schools. For the purposes of this report, data on four year programs and on national programs were excluded. These institutions are not the focus of the current feasibility study. Information was obtained on thirty-six remaining programs in the Guide.

The average full-time enrollment of the institutions serving deaf students was about 5,800 with a range of 190 to 20,600 students. The average number of deaf students enrolled full-time was 33, with a range of 10 to 110. It must be noted here that these data, although the best available, are nearly three years old as of this writing. Many of these programs have grown, and some may have decreased in size.

In most cases (78%), the major emphasis of the programs taken by deaf students is technical and/or vocational. An additional 19% reported their major emphasis as being both academic-liberal arts and technical-vocational. Only one program in thirty-six has a major emphasis in liberal arts only. The trend among deaf students is clearly toward the use of community colleges and technical schools for occupational training programs rather than transfer programs.

In addition to the above information, the Guide to College/Career Programs for Deaf Students lists the support services offered by each program. Definitions of these services can be found in Appendix B. The most frequently provided support services are listed below in descending order. The percentage of all programs providing each service is noted in parentheses. Again, these data do not reflect national programs or four year colleges and universities.

(1) Interpreters (100%)

(2) Personal Counseling (100%)

(3) Tutoring (92.8%)

(4) Vocational Development (92.8%)
(5) Notetaking (85.6%)
(6) Vocational Placement (85.6%)
(7) Manual Communication for Deaf Students (78.4%)
(8) Manual Communication for Instructors (78.4%)
(9) Social/Cultural Activities (78.4%)
(10) Special Classes for Deaf Students (52.7%)

Other support services include speech and hearing services (offered by 44% of the programs) and supervised housing (available at 22% of the programs).

Of the most common support services, personal counseling, vocational development, and vocational placement are all parts of the counseling component. Some form of counseling is offered by all of the programs. According to these data, the vast majority of programs have a core of support services: Interpreting, Counseling, Tutoring, and Notetaking.

Another extremely important publication is Principles Basic to the Establishment and Operation of Postsecondary Education for Deaf Students (1973). These guidelines, written for institutions which are considering serving deaf students, were devised by an Ad Hoc Committee of the Conference of Executives of American Schools for the Deaf (CEASD), an organization of administrators in education of the deaf.

The feasibility study of postsecondary education for deaf people in Maryland is being conducted in accordance with Principles. CEASD definitions of support services are included in Appendix A for reference. However, the entire document should be read carefully by those who may be serving deaf students in the future.

METHOD

A series of visitations to postsecondary programs was planned for acquiring up-to-date and detailed information on how these programs are implemented. The researcher attempted to select a cross section of programs based on the following parameters:

-Size of Program: The range in size of programs visited was from the smallest to the largest programs listed in the Guide.

-Age of Program: Programs selected ranged in age from two to sixteen years.

-Academic or Vocational Emphasis: The range of programs in this area was from a strong transfer program to a completely vocational-technical emphasis.

-Funding Sources: Some programs are supported totally by state money, others totally by federal funds, and others by various combinations of funding sources.

-Location: Suburban and metropolitan centers were visited. Highly regionalized programs which serve many states as well as several programs located in one metropolitan area were included in the itinerary.

-Type of Institution: Most programs were located in community colleges; however, one vocational-technical program and one adult school were visited.

-Other Considerations: If a program was run in conjunction with a complementary program, such as paraprofessional training, it was given strong consideration. Also, programs which were unique in some way, such as in serving deaf individuals with very low reading levels, were given priority.

The eleven programs selected for possible visitation were Northwestern Connecticut Community College, Career Programs for the Deaf, Winsted, Connecticut; St. Paul Technical-Vocational Institute, Program for Deaf Students, St. Paul, Minnesota; American River College, Hearing Impaired Program, Sacramento, California; Los Angeles Pierce College, Special Services, Woodland Hills, California; Golden West College, Hearing Impaired Program, Huntingdon Beach, California; Pasadena City College, Hearing Impaired Program, Pasadena, California; Valley Vocational Adult School, Deaf Program, City of Industry, California; Riverside City College, Program for the Deaf, Riverside, California; Eastfield

College, Services for Handicapped Students, Mesquite, Texas (near Dallas); Tarrant County Junior College District, Service Center for Opportunities to Overcome Problems, Fort Worth, Texas; the Community College of Philadelphia, Program for Hearing Impaired Students, Philadelphia, Pennsylvania. In all cases, the directors of the program for deaf students were receptive to a visit of one to three days by the project coordinator, and they blocked out time for a lengthy interview.

Information to be obtained. During the first six months of the feasibility study, questions were collected about methods used by other programs. Sources of questions included Howard Community College Staff, Deans of other community colleges, the project advisory committee, and others. These questions were compiled prior to the trip and distributed to the advisory committee for feedback. In addition, Brenda Rawlings of the Office of Demographic Studies at Gallaudet College (co-editor of the Guide to College/Career Programs for Deaf Students) reviewed the questions and made suggestions. A revised list of questions was then put into an interview sheet format.

Five sections of questions comprised the interview. The first section asked for information on students, enrollment, and admissions. Section two dealt with specific aspects of support services. The third section, questions about administering a program for deaf students, was the longest section. There were two other sections: one for interviewing deaf students and one for interviewing a representative of the host institution. Other activities, scheduled when possible, included visits to integrated and special classes, a tour of the facilities, and social activities involving deaf students.

One concern of the advisory committee was that the list of questions was too long to be covered in one or two days. To check the length of time required to obtain the most important body of information, a one-day visit to the

Community College of Philadelphia served as a field test before the trip. The field test also resulted in the revision of awkward questions.

The visit to the Community College of Philadelphia showed that the questions for the program director could be answered in one day, with some time left to talk with other staff members as well. A second day's visit would permit interviews with students and with administration of the host institution, as well as classroom observations and a more extended tour of the facilities.

Arrangements. Programs were contacted more than a month in advance of the proposed visit, and all program directors were receptive and able to cooperate in the study. The programs originally contacted are those listed above, with one exception. A substitution was made when the project coordinator learned of a program that was unique and of potential interest for Maryland. One visit was cancelled and another scheduled in its place.

RESULTS AND THEIR IMPLICATIONS FOR MARYLAND

In summarizing the results, no attempt is made to generalize findings to all programs for deaf students in the United States. Rather, the intent of this analysis is to use the experiences of several programs as a basis for recommendations for a new program in Maryland.

The implications of findings are presented in terms of one projected regional community college program in the state. Because of the high excess cost per deaf student, this is the most feasible way to begin community college services for deaf people. If a new program is well attended and the need can be demonstrated for a second program, much of the background work will have been done.

However, all postsecondary occupational education for deaf people will not necessarily be provided by community colleges. For example, it may be advisable to establish intensive support services at an adult vocational program run by a local adult education department, and/or expand the role of the Maryland Rehabilitation Center. Recommendations on these alternatives will be made following the next phase of the feasibility study, and analysis of Maryland's postsecondary occupational education resources.

For the sake of convenience, in this report implications are described as they relate to community colleges. The vocational institute and adult school visited had essentially the same support team model in their programs for deaf students as the community colleges visited.

Students-Enrollment

1. What is the target population of your program? All programs serve hearing impaired students, and most collect audiometric information for substantiation. In California, proof of hearing loss is required by law to receive special services. With one exception, each institution visited technically serves its respective locality. In practice, however, all programs visited serve their surrounding regions as well because programs are rarely located close together. In all cases, some students come from out of state. St. Paul Technical Vocational Institute is funded as a regional program and draws a large percentage (92%) of its students from out of state.

Implications. Although a program may technically serve only its locality or region, a number of students can be expected to attend from out of state. In Maryland, this will almost certainly be the case, because northern Virginia, West Virginia, Washington, D.C. and Delaware have no community college programs for deaf students. Also, some individuals whose hearing impairment is mild or moderate will be attracted to a program of this kind.

The target population of a program in Maryland should be primarily Maryland's hearing impaired residents.

2. *Does your program have a set admissions procedure? What is it? What are the cut offs for students in terms of reading level, hearing loss, I.Q., age, and other variables?* All of the community colleges visited have open door admissions policies; this means that they cannot turn down a student who desires services. (St. Paul TVI is not an open door institution. It has admissions screening and there is a waiting list). Most of the colleges employ various screening devices for deaf students so that they can counsel a student prior to enrollment as to his/her prognosis for success in the college. These screening devices also serve as placement instruments and may be analyzed by item so that remedial reading and math needs can be ascertained. Some tests used are in-house tests, some are standardized. Grades from secondary schools are rarely useful because of variable grading systems and curricula.

In almost all cases, admissions counseling is done on a completely individual basis, with no established cut off in any one area. Several program directors pointed to maturity and motivation as crucial factors determining the success for failure of any student.

One community college program, which has a heavy academic-transfer emphasis, has a more structured screening and advisement system. All admissions of deaf students are done by the program staff. The cut off for success of deaf students in this particular college, based on previous students' profiles, is 7th to 8th grade reading level.

On the other hand, a counselor in another college program stated that if a student has about a fifth grade reading level, that student may be a successful student in a community college if he or she has other qualities. For example, exceptional talent in his or her major topic, an independent and serious attitude toward college, and motivation to succeed would help the student overcome the achievement gap. The counselor stated that many adults in their twenties or older have these qualities. Many recent high school leavers do not have these characteristics, and are ill-equipped to meet the challenges of a community college.

Implications. Of course, all admissions decisions will be done on an individual basis. The staff of a program for deaf students in Maryland should work closely with the admissions department of its college or other institution, and should act as an advocate for students who could reasonably be expected to succeed. Deaf students should come to the college for an interview and some testing. The details of Vocational Rehabilitation's role (payment for services, hearing and physical testing, etc.) should be worked out prior to admission.

3. Do you recruit students? There is great variation in the amount of recruitment done. Several programs do no recruiting while others travel over a multi-state region to tell deaf people about their program. The most common method mentioned was visitation to the local residential school for the deaf or large day program.

Implications. In Maryland, in the early stages of a program, a recruitment effort would be advisable. Activities should include visits to secondary schools programs, clubs, and other organizations of and for deaf people. An orientation to the new program should be given to Vocational Rehabilitation counselors serving deaf clients. Brochures should be widely distributed. It is essential that deaf people be aware of the program. As the program grows, the need for this kind of effort should decrease.

4. How many students have you served each year? Do you anticipate any changes in numbers? The researcher had hoped to find some kind of trend in the growth of postsecondary programs for deaf students, so that projection

figures for Maryland could be computed based on other programs' experience. Unfortunately, there is no pattern of enrollment growth among the colleges and other postsecondary institutions visited.

Several programs have experienced fluctuating enrollments. Several others have grown steadily, for example, 7 students to 25 in three years, or in another case 40 students to 130 in six years. Several schools had never computed full-time equivalent enrollments for their deaf students. A few programs grew very rapidly (e.g., 6 students in the first year and 35 in the second year of the program). Most programs were conservative in their projections for the future and predicted a leveling off at their current enrollment.

Implications. Because there are neither formulas nor reliable trends for predicting enrollments of deaf persons, any projection of deaf student enrollment will be basically arbitrary. Among the institutions visited the largest first year enrollment of a new program for deaf students was 40. This large initial enrollment occurred in 1969-70 in two different institutions, both of which served a large region at the time. Because a program in Maryland would be regional and would serve a population base of at least 4,000,000 people, a large initial enrollment can be expected. If a conscientious effort is made to reach deaf citizens first year enrollments are projected at 25 to 30.

5. What is your dropout rate? For what reasons do dropouts occur? Dropout rates quoted ranged from five to thirty percent. In most cases, these rates were the same as or lower than that of the student body in general. Reasons given for dropouts were both school related, such as poor grades, and non-school related, such as marriage. Most program directors did not perceive dropping out as a major problem.

Implications. As a student population, deaf students seem to be at least as stable as the general student body. However, it must be noted that this holds true when comprehensive services are provided as an integral part of postsecondary education.

6. What is the average load a student carries? Twelve hours was the median figure given. One college has a heavy part-time enrollment among deaf students, but in the other institutions visited, most students carried a standard load of credit hours.

In the first year of the program, many deaf students take about 6 hours of coursework in special classes taught by instructors who specialize in deafness. These courses are credit-bearing and are counted toward graduation if they fit into the students' programs; however, they are not transferable to another institution. The credit hours give students incentive to achieve in these special classes without making their diploma become a degree in remedial English and mathematics.

Implications. Although course load will vary greatly, a program director can anticipate about 12 credit hours per deaf student who is enrolled full-time.

7. Where do students live? Two of the schools visited provide housing near campus via interagency agreements. In one case this is federally subsidized housing and in another, students may lease dormitory rooms in a nearby college, if they are available. All other programs said that students lived either with parents or in rented apartments. Two-thirds of the programs visited give apartment-finding assistance of some kind to students relocating in the area. This type of help is apparently time consuming and difficult to handle. Students' communication problems and lack of experience in independent living compound the usual low income and short-term lease problems which almost all students encounter.

Implications. Because a new program would serve students on a regional basis, housing availability should be a consideration in planning. Since Maryland's community colleges have no dormitories, there should be nearby apartments which have moderate rates and flexible leasing arrangements. In the schools visited in California, such housing is common, but in Maryland, it is much harder to find. The magnitude of the problem will depend in part on the number of students who must relocate. Of course, a program should be located within easy access of as many deaf people as possible.

8. What financial support do students receive? All institutions mentioned Vocational Rehabilitation as a source of support for many students. Case service money supplied by the agency varies because each state has different policies. The second most common source of student financial assistance was Supplemental Security Income, a monthly allotment for those who are unemployed and disabled. Most institutions also mentioned Basic Educational Opportunity Grants, loans, and other programs which are open to both hearing and deaf students.

One college has a special loan fund for lending up to $50 for books in cases where there is a time lag between the purchase of books and reimbursement by Vocational Rehabilitation.

Implications. The director of a program for deaf students should become familiar with all financial aid opportunities available. When applicable, the student should work through the financial aid office of the institution, rather than have the program director handle all student aid. However, direct liaison with the Division of Vocational Rehabilitation's counselors is vital.

9. What records and reports are kept on deaf students? Three of the programs visited keep no records on deaf students in addition to those kept

by the college. Four other programs keep a moderate amount of information on file: admissions forms, grades and planned course of study, follow-up information after completion of program, in some cases an audiogram. No program visited in California keeps more information than this.

The remaining four programs keep additional information on deaf students. Some examples of additional records kept on file:

-Transcipts of previous education

-Computerized career guidance printout

-Contact sheet for important dealings with individual students

-Correspondence regarding the student, usually transfer

-A self-evaluation form

-Vocational Rehabilitation information

-Health information (in a regional program)

Implications. Records to be kept on deaf students will depend on the requirements and policies of the institution, the requirements for services from the Division of Vocational Rehabilitation, legal restrictions, and the needs as perceived by the program staff.

10. What is the biggest problem faced by most deaf students in the integrated setting? Social adjustment factors were the most often noted problems. According to several program directors, many students enter the college expecting not to have to do things for themselves; they are overly dependent on support service personnel. Many are living away from home for the first time and problems they encounter outside of school affect their performance in school. One director described this adjustment as one of acculturation.

Other program directors emphasized students' problems with English language, reading, and writing. Tutorial help is a major need of many students. A few other problems were mentioned, mostly related to communication. Some students have been taught that sign language is wrong, and must learn it as beginners.

Implications. Logically, one might have assumed that communication and educational lag would be students' greatest barriers in an integrated setting. Fortunately, interpreters, notetakers, tutors, and special classes help with these problems.

Counseling can ameliorate, if not solve the problems of acculturation, socialization, and the lack of readiness for a large number of educational adjustments. Most programs do not have counselors for deaf students; counseling is often done by a program administrator or teacher who is not a trained counselor. The absence of a strong counseling component may be one reason for program directors' opinions on this topic. A new program can take advantage of this knowledge by having a strong counseling support service.

11. What percentage of your students take primarily an academic load? A vocational-technical load? Nine of the eleven institutions could answer this question. In most cases, percentages given were rough estimates. Approximately 62% of deaf students are currently enrolled in vocational-technical programs, with 38% transfer programs or programs of general studies.

Implications. It is vital that a community college serving deaf students on a regional basis should have strong programs in vocational-technical education. The institution should provide a variety of occupational training programs.

12. Do you have a waiting list? If so, how long is the delay between admission and enrollment? Only two programs visited have waiting lists. In one case, the program with a waiting list exists within an institution which

also has a waiting list. The situation has been improved in recent years because the institution has agreed to save spots in specified programs for deaf students. The number of spots is negotiated annually. Waiting periods vary according to the course of study desired by the student; some programs have longer lists than others.

One community college has a waiting list based on student abilities; borderline students are more likely to be placed on a waiting list. The purpose of this waiting list is to keep the staff:student ratio at a level which permits high quality services. The procedure is analogous to establishing a waiting list in K through 12 programs for handicapped students when class size reaches the maximum advisable level.

Support Services

1. What are the highest priority support services in your program? According to program directors, interpreters are the basic, most essential support service. Next in priority were instructional components such as special classes and tutors. Counseling was listed at nearly the same level as the instructional component. Notetakers were mentioned at the next level of priority.

Implications. Minimum support services must include interpreters, special classes, tutors, a counselor, and notetakers. These services are what Robert Lauritsen, Director of the Program for Deaf Students at St. Paul Technical-Vocational Institute calls the "critical mass." Regardless of the numbers of deaf students enrolled, the administering and coordinating of these services must be done by a professional who has experience in working with deaf people and if possible, has community college experience.

2. What is your student:counselor ratio? Despite the high priority given to counseling as a support service, only the largest programs visited have

full-time counselors and in most cases even these counselors have other administrative duties. Counselor:student ratios for all programs visited ranges at best from 1:25 to 1:100 at worst. However, programs which have no full-time counselor consider the program director as their counselor, despite the fact that a limited amount of a director's time can be devoted to counseling.

Implications. Several program directors recognized this weakness in their support service system and said that they have had difficulty in obtaining funding for counseling positions. Perhaps this lack of adequate counseling is a reason that social adaptation is seen as the major problem deaf students face, rather than communication. Counseling often takes low priority in education, but when institutions open their doors to handicapped individuals, they must realize that these individuals have more adjustments to make than do non-handicapped individuals. If the student is frightened, threatened, confused and/or overwhelmed, he or she faces a much greater chance of failure.

3. What are the duties of each position in your program? The staff of each program usually have multiple interdisciplinary duties because of the wide range of needs of a relatively small number of students. Only the largest programs had clearly defined positions.

The two largest programs visited use their staff as follows:

Program A (130 deaf students)

1 administrator - counselor

1 counselor

3 teachers

1 teacher - audiologist

1 lead interpreter

Many full-time and part-time interpreters

Program B (130 deaf students)

- 1 administrator
- 2 counselor - administrators
- 1 teacher
- 1 lead interpreter
- 1 media director
- 1 continuing education coordinator
- 1 interpreter training coordinator
- Many full-time and part-time interpreters

Each of the smaller programs visited divides staff differently. Almost every possible combination of duties is used. The administrator of the program usually does some teaching or counseling in addition to some administrative duties. This person usually works with college staff in admitting deaf students, registering of deaf students, faculty in-service, working with the college public relations department, representing deaf students' concerns in administrative matters, recruiting students, handling the program budget, articulating with Vocational Rehabilitation, and supervising other staff members and the program as a whole. In some cases, the administrator schedules interpreters and/or arranges for tutors. Often, however, a lead interpreter is given these responsibilities. The duties of lead interpreters vary, but can include the following: scheduling of interpreters, arranging for tutors, in-service training of interpreters, working on maintaining high interpreter morale, training of new interpreters, evaluating interpreters interpreting, teaching sign language, and training of notetakers.

An instructor in a program for deaf students may teach special classes, tutor, arrange for tutors, train notetakers and schedule them, assist college faculty in adapting instructional media for use by deaf students, and/or teach sign language to hearing students and staff.

As mentioned above, few programs have full-time counselors. When counselors are on the staff of a program for deaf students, they may have responsibility for personal, social, academic and career counseling as well as placement following completion of the program. In addition, they are often expected to do testing, assist students in finding housing, handle correspondence with vocational rehabilitation, and/or perform other duties.

Implications. The combination of duties of each staff member of a new program will depend on the abilities and degree of versatility of those hired. Also, if the institution serving deaf students has an interested and enthusiastic staff, some support services can be assumed by them. For example, faculty in-service, efforts in placement, and materials development may be assisted by other staff. Their involvement may increase the deaf student's feeling of belonging.

4. If you could have one more position, what would you add? Over half of the programs would add a counselor. Other needed positions listed were instructor, interpreter, and office assistants.

Implications. Again, counseling seems to be the most often overlooked support service component of programs for deaf students.

5. Where do you find your interpreters? Los Angeles has an abundance of interpreters when compared with other areas. All institutions visited in the Los Angeles area had ample numbers of interpreters seeking work. In four other postsecondary schools visited, training was done on campus, and two of these granted an Associate of Arts degree to those trained as paraprofessionals in deafness. One institution has a federal grant to train interpreters for its region.

One college hires interpreters as full-time professional level employees who have background in a certain subject area, and thus can interpret more effectively. This method is more costly than hourly interpreters but has substantial benefits for deaf students. The interpreters also teach sign language for the college and interpret for evening courses.

One eastern college had trouble at first finding interpreters but is now gradually developing a pool. Initial recruiting efforts focused on friends and families of deaf people as well as staff of secondary level educational programs for deaf students.

Implications. There is at present an inadequate supply of interpreters in Maryland. Most certified interpreters here are employed full-time and many work in occupations which do not directly involve interpreting.

Interpreter training should be offered in the college which has services for deaf students. The training program could begin in the non-credit community services division, while planning is being done to institute interpreter training in the credit area. Ideally, this training should begin before full implementation of the program.

Newly trained interpreters could do practicum in classes which do not require high level interpreting skills, such as physical education. Frequent contacts with deaf students would allow them to increase their communication skills. The employability of those who complete the program need not be limited to interpreting; for example, an interpreter with secretarial abilities would be in great demand as secretary for deaf people employed in government and in business

Gallaudet College has an interpreter training program; if a new program for deaf students is located near Gallaudet, this resource is an alternative solution to the problem.

6. Are interpreters full-time or part-time? Most programs hire some full-time and some part-time interpreters. Three programs hire only part-time interpreters. Opinion is very much divided on this issue.

Some support the use of part-time interpreters so that money can be saved on benefits. Others prefer full-time interpreters because they are always present when needed, they are conscientious employees because they do receive benefits, and they can serve students in other ways. Some full-time interpreters also do clerical work or scheduling as well as substituting and interpreting for student activities, student-teacher conferences, and other interpreting situations.

Implications. The combination of full-time and part-time interpreters allows extra staffing during peak classroom hours, usually in the morning. A new program should have at least one full-time interpreter.

7. What problems, if any, do you encounter in scheduling interpreters? The most common dilemma is finding enough interpreters to cover all classes at popular times. Sometimes programs circumvent the regular registration process to get several deaf students in one section of a multi-section course.

Course dropping and adding by students causes scheduling problems for which there are no easy solutions. The researcher has a personal friend who was interpreting part-time for one of the colleges visited. Her original schedule for Friday contained three one-hour classes: one at 9 a.m., another at 10 a.m., and a third at 1 p.m. In the third week of the semester, the deaf student in the 10 a.m. class dropped that course and as a result she was forced to be at the college from 9 a.m. until 2 p.m., and was paid for only two hours. Such situations are not the fault of the student, the interpreter, nor the program director. However, they do have a detrimental effect on interpreter turnover and morale.

Another problem in scheduling interpreters is that the task of interpreting is very demanding, both physically and mentally. Because interpreters "wear out" after a few hours, an effort is usually made not to schedule too many classes in a row.

Finally, there is the problem of matching the interpreter's expertise with the subject matter to be interpreted. An interpreter may be more skilled in interpreting an English class than a math class, for example. The staff member responsible for scheduling must get the best possible match of interpreters and classes.

Implications. The college should make a commitment to permit advance registration of deaf students so that interpreters can be scheduled with maximum efficiency. If possible, interpreters should be screened for educational background as well as other factors. Because interpreters are in short supply at the present time, a new program will not be able to be so selective at first.

8. Do you have paid notetakers? The programs with heavy vocational-technical emphasis do not pay or train notetakers. Other programs are evenly divided between paid and volunteer interpreters and also between trained and untrained notetakers. Where training is not offered, printed material on notetaking is usually given to new notetakers. Hearing classmates are the most common source of notetakers. One college requires a certain GPA to qualify for a paid notetaker; another requires that the student be majoring in that subject; another requires the recommendation of the instructor. Several program directors use the technique of screening notes a few weeks into the semester. This can be done by the instructor of the course. Of course, feedback from deaf students themselves is extremely important.

Implications. Notetakers should be paid and trained to assure good quality notes for deaf students. They should be class members who have above a flat B average and who attend class regularly.

The training of notetakers need not be long but should include outlining skills, methods of showing emphasis, procedures in case of absence, and the evaluation form which will be used to rate his or her notes. A short tape recorded lecture can be used at the end of the training session as a preliminary test of notetaking skill.

9. What outside agencies do you use for referral or other purposes? Vocational Rehabilitation is the most extensively used agency. Two programs have a Vocational Rehabilitation counselor on campus one afternoon per week, an arrangement which they feel is very helpful.

Speech and hearing agencies were used by two programs. Two program directors mentioned mental health services, but in both of these cases, a mental health program for deaf people was located in the vicinity. Such programs are rare.

Implications. Regular visits by a Vocational Rehabilitation counselor to a program for deaf students are of real benefit to students and to the program staff. Cooperative relations with a nearby speech and hearing agency would also benefit students and increase the agency's opportunities for work with deaf adults.

Another report of this feasibility study, Complementary Resources for a Community College Program for Deaf Students in Maryland, examines public services for deaf people in more depth.

10. How do you work out the auditory problem in audio-tutorial instruction? Videotape equipment is an investment which has many benefits for those programs which have access to it. One benefit is that audio-tutorial instruction can be videotaped in sign language and then used by deaf students the same way that hearing students use it.

Programs without videotape equipment use either an interpreter or scripts. The use of interpreters is expensive because it is done on an individual basis. Also, unlike hearing students, deaf students cannot walk into the Learning

Resources Center and use the self-instructing machines at any time, because they must ask for an interpreter in advance.

The use of scripts is relatively inexpensive, but students complain about the lengthy reading that is not required of their hearing peers. Scripts increase the dependency on language and reading, which can cause real problems for some deaf students and which defeat the purpose of audio-tutorial instruction. Deaf students may become less motivated than hearing students who can sit and listen instead of reading long scripts.

Implications. Most audio-tutorial courses and assignments taken by deaf students should be videotaped. The process is simple: the interpreter interprets the audio tape on videotape, which is then stored for use by deaf students.

Videotaped instruction with an audio component can be captioned, or else interpreted by means of split screen. Other special needs in self-instructing media can be handled individually by program staff and media personnel, with the advisement of deaf students.

11. Describe the in-service training which your program provides the regular faculty and staff of your institution. Most of the programs visited offer voluntary sign language classes to the faculty and staff of their respective institutions. Many of the programs have no additional in-service.

A few programs have coffee and donut gatherings at the beginning of each semester for instructors, deaf students, and interpreters. Some other programs schedule a portion of the regular faculty in-service time for teaching about the deaf student in the classroom. This may be several hours at the beginning of each semester.

Implications. Support services in community colleges and other programs are designed to do just what the name implies: provide support. Ultimately it is the instructor who is responsible for the education of the deaf student. One major means of avoiding paternalism, discrimination, and misunderstanding is to prepare faculty so that they feel secure about serving deaf students. Especially at the beginning of the program, in-service on the topic of deafness should be given to each faculty member as part of the required faculty development program. In addition, informal gatherings for staff, students, and interpreters should be provided. "Bag lunch" small group sessions should also be available on a regular basis. The program director should answer individual questions and requests for assistance from faculty as well.

12. Describe your preparatory program for deaf students. Although the newest programs visited are still working on this aspect of support services, most programs visited have some kind of specialized classes for deaf students.

Usually there are at least two classes of a remedial nature which can be taken for credit. In most cases, a teacher trained in deafness and fluent in manual communication teaches these courses.

Three programs have intensive preparatory programs prior to the students beginning the regular courseload. These programs range from 6 to 12 weeks in length, and students take coursework in basic reading and math. In one program, students also receive work evaluation, consumer education, communication and health instruction.

Implications. Course outlines of special classes offered at Golden West College are provided in the Appendix for possible use as a reference by the staff of a new program for deaf students. The needs of students will dictate what special classes will be offered.

Summer school offerings in intensive developmental reading and math can help students catch up where necessary. A student orientation to the college and the support services offered should be available for new students.

13. What do most students take in their first two semesters? There is a great deal of variation, but often students begin the regular course of study, with the exception of the remedial work needed. The first semester load is about nine to twelve hours in those institutions which have a semester system.

In programs which have preparatory coursework prior to enrollment in the regular curriculum, students take the same courses as do hearing students once they are enrolled.

Some programs have neither special remedial classes nor preparatory programs and deaf students always take the same courses as do hearing students. One program offers extensive options in special classes; sometimes students' first year is filled with these classes, and no integration takes place until the second year.

Implications. Deaf students, like hearing students, may be very anxious to get involved in their major course of study as soon as possible. To delay this involvement in the interest of remedial study can result in student apathy. The researcher favors a combination of hands-on experience with developmental work as needed by the individual students.

14. Is there something unique about your support service system? Some innovations cited included the following:

Media: videotape is extensively used by some programs. One college tapes all classes for use by both deaf and hearing students for make up and review. Videotape also helps in sign language instruction and in vocabulary development (signs for technical terms) as well as orientation to the college.

Slide tape presentations are very effective as a tool for in-service of the regular faculty and students.

Complementary Programs: The interaction between the program for deaf students and training programs for interpreters and other paraprofessionals is a unique situation which proves very successful.

One college has a community service center for deaf people, in addition to the regular support services for students. This community service center provides assistance to deaf community members in dealing with public agencies and in solving problems of daily life. Also, the center has developed a unique program to teach deaf people about various teletype models and how to use them.

Student Life: The popularity of sign language among hearing students has resulted in several social clubs of both deaf and hearing students. One program which has a counselor trained to work with deaf students offers a regular group session for deaf students on survival in the college setting.

Administration

1. What is the administrative line of authority? Most of the programs visited answer to a dean or other administrator of student services, two program directors answer directly to the head of the institution, and three answer to an administrator of the instructional division.

Implications. The administrative design of the institution will influence decisions on this matter should a program for deaf students be established. The Student Services department is a logical place for a program, but the support services offered also affect the instructional component of an institution. No matter where the program is located in the administrative chart, it is imperative that the interests of deaf students be represented in administrative decisions.

2. Is the program for deaf students part of another program? About half of the programs visited serve only deaf students, whereas the others serve all

handicapped students. Most programs in California and Texas serve all handicapped students through one or more "enablers for the handicapped", who coordinate services for all handicapped students on that campus.

Implications. A program for all handicapped students is an option which Maryland's postsecondary educational agencies and other related agencies may wish to consider.

There are some problems with this model, however. First, handicapped people have very different needs, depending on their respective handicaps. The ideal institution for serving one handicapped group is not necessarily the best for serving another group of handicapped students. For example, the minimum criterion for a college of other postsecondary programs to serve all handicapped students would be optimum accessibility in terms of barrier-free structures. However, the most barrier-free institution may not necessarily have the best occupational training offerings for most deaf students.

Another problem with this model is that staff of a support service program for all handicapped students will most probably have had more experience with the problems of one handicap than another. Services of equally good quality may not be available to all handicapped students.

This model should be studied in more depth. Recommendations for each handicapped group of individuals should be made on the basis of their respective needs.

3. Do the personnel policies of the institution apply to staff of the program? In all institutions, personnel policies of the institution apply to the staff of the program for deaf students, except for interpreters.

4. Are salaries comparable to that of the institution's faculty and staff? Yes, in all cases.

5. What are interpreters paid? Do they receive any benefits? Interpreters earn between $3.50 per hour for a student-intern interpreter, to $8.50 per hour for a highly skilled and experienced interpreter. Merit is based on educational background, training, certification status, and experience. Most part-time interpreters receive no benefits. In California, state law requires that employees who work more than 20 hours per week must receive benefits. This protects some interpreters there. However, in other states, there are no comparable rules.

Implications. In Maryland the policies of the host institution regarding part-time support staff will probably be applied to interpreters.

6. What are your funding sources? Vocational Rehabilitation, Vocational Education, the local school district, and state funds are the most common sources of financial support for programs for deaf students.

Vocational Rehabilitation usually supplies direct service money for interpreters, notetakers and other hourly support services. When done on an individual client basis, the procedure is long, complex, and sometimes unreliable. Eastfield College in Texas has an agreement with Vocational Rehabilitation for excess cost of $1,836 per deaf student in direct client services money for hourly support services.

Vocational Education's monies are used many ways, often as program staff salaries. The local school district's share varies. Some districts supply office space, equipment, supplies, and utilities only, whereas others pay the program director's salary, and still others support the entire program.

The State supports programs in Connecticut and California. In Connecticut, the program for deaf students was a legislated item which resulted in a line item in the state budget. The state guarantees a certain sum, and if other sources of funding can be found, that amount is reduced by the amount of outside assistance available.

California's Assembly Bill 77 guarantees a flat excess cost figure to be allocated for each handicapped student in a community college. During 1976-1977, this figure was $785. Next year the figure will be doubled for severely disabled students, such as deaf students.

One program visited is a regional program funded by the Bureau of Education for the Handicapped. There are four regional programs guaranteed funding through BEH; three of these institutions are less-than-four-year colleges or technical schools. Although there is no regional program in the east, the current appropriation is low and would probably not allow the addition of a regional program.

Implications. Vocational Technical Education and Vocational Rehabilitation are promising funding sources for a new program, but there should be a concerted effort to get state support for the program, since it would serve Maryland's deaf citizens.

7. Do you have adequate space for your offices? Office space is not seen as a major problem by the programs visited. The institutions in which they are located seem to be meeting their needs or have promised expansion in the near future.

8. Are there Teletypes (TTY's) at the college? Any other equipment? Every program has at least one TTY and/or MCM (a portable teletype). Other equipment owned by individual programs included:

-videotape recorder and player, monitor

-photocopy machine

-lab for 16 mm film production

-work evaluation equipment

-phone amplifier, amplified pay phones

-self paced instruction machine that uses lights rather than sound to indicate a correct response

-special effects generator for split screen interpreting

-amplified headsets in audio-tutorial carrels.

Implications. Telephone and teletype equipment should be priority acquisitions. There should be a TTY in the offices of the program for deaf students and in the community services office. Videotape equipment and photocopy equipment should be readily available. Other equipment can be added as needs arise.

9. *What resources of your institution are used most by the program for deaf students?* Library and media services, under their various titles and acronyms, were the most used resources. The Placement Office and work experience program were also mentioned by several program directors.

Implications. The program staff should attempt to gain the interest and involvement of the college in deaf students' education and activities. In doing this, they might begin with the learning resources and career counseling personnel.

10. *How would you assess the general attitude of the regular faculty toward the program? What about the administration? The hearing students?* Responses indicated that the vast majority of faculty have a good attitude toward deaf students in all institutions, although several program directors noted that there were a few individuals who exhibited negative attitudes. Administrative relations were described as being good also; a few administrative problems seem to stem from concern about the expense involved in educating deaf students. Hearing students were the most enthusiastic of the groups, and many learn sign language.

Implications. Based on the experiences of other institutions, a negative reaction of faculty, staff or students should not be expected if adequate support services are provided and if there is good orientation.

11. *How do you manage your liaison with Vocational Rehabilitation?* Since Vocational Rehabilitation is a funding source which operates on an individual

client basis, liaison is very important and sometimes difficult. Relationships with Vocational Rehabilitation vary from poor to excellent among the programs visited.

Characteristics of programs having good relationships with Vocational Rehabilitation include:

(1) Vocational Rehabilitation counselor comes on campus one day per week.

(2) Contact is maintained by telephone.

(3) One counselor serves most of the program's students and the relationship with this counselor is good.

(4) There is a flat excess cost rate for deaf students attending the school. This allotment pays for interpreters and notetakers.

(5) A systematic method of working with Vocational Rehabilitation has been worked out internally in the college.

(6) Staff members of the program for deaf students have a professional background in rehabilitation.

Characteristics of programs with poor relationships with Vocational Rehabilitation include:

(1) One counselor serves most of the deaf students of the school and there is a personality conflict between the program director and the counselor.

(2) Several counselors serve the deaf students in the program, and the competencies of these counselors vary greatly.

(3) The program director has no direct contact with Vocational Rehabilitation.

12. How many of the hearing staff members of the institution can sign? Most programs said that up to six faculty members had learned to sign, and one

program said that twenty of the faculty members had learned. Many more have taken introductory classes so that they have a basic understanding of the nature of sign language.

Implications. Although only a handful of faculty will become fluent in sign language, classes should be made readily available for those who are interested. Deaf students often develop special rapport with faculty who have tried to go half way in breaking the communication barrier.

13. Are there deaf people on the program staff? Most institutions have at least one deaf person on the staff, either as faculty or within the program for deaf students. The presence of deaf staff members gives a role model for deaf students and helps hearing people in the institution to understand the capabilities of deaf individuals.

Implications. If at all possible, a deaf person should be part of the staff of the program for deaf students. Deaf staff members should be outgoing individuals who can work with hearing faculty and staff.

14. Are social events integrated? Are there any separate social events? The extent of student involvement in student activities and social life at school ranges from no involvement to very active involvement. The degree of integration and social life at school ranges from only separate activities to only integrated activities. There is no common denominator.

Implications. A balance of activities should be encouraged so that deaf students can enjoy socialization at the college. Activities could include an all deaf club or team, an integrated club or team, and full participation in school wide activities. Interpreters should be provided for student events.

15. Do deaf students have interpreters for all courses? Nearly all colleges provide interpreters for every course requested. In a few cases, interpreters are not provided for all physical education activity classes.

Implications. The policy of programs to provide equal access to education should be followed as closely as possible in Maryland. A regional program is a compromise agreement from a deaf person's perspective, since ideally, full support services should be available in every locality which has deaf people in its community. If only one college has a program, then all of its courses should be open to deaf students.

16. Is there a cooperative work experience program? None of the institutions visited has an extensive work experience program with many deaf students involved. Those which did have such programs were community colleges in which the program for deaf students works with regular college staff to place deaf students in work situations.

Implications. Other support service priorities probably prevent extensive involvement of program staff with the institution's work experience program. New students require more staff time than do those second year students who are most likely to be candidates for work experience. Ideally, a new program in Maryland should get deaf students enrolled in the work experience program.

17. Do you have an advisory committee? How do they function? Not all programs for deaf students have advisory committees. Those programs with advisory committees state that they meet from one to four times per year and have an advisory and "sounding board" function rather than a governing function.

Implications. An advisory committee established for a new program for deaf students should advise program staff.

18. Do deaf students attend other nearby colleges if they are interested in these programs? If so, how do you coordinate support services? About half of the programs visited have a small number of students attending another facility or another institution. In most cases, students go for occupational training and only interpreting is provided as a support service.

One community college is located in a district which has three colleges, each of which specializes in one handicapping condition.

Another community college serves as the central support service site for a three campus district. All of the campuses serve all handicapped individuals and one paraprofessional on each campus coordinates the services for that campus. Recently, however, all deaf students were moved to one campus because this administrative model was not meeting their needs.

The most highly developed attempt at a consortium arrangement is found at St. Paul Technical Vocational Institute. There, fifteen to twenty students are attending other postsecondary schools for occupational training not available at TVI. One full-time counselor serves on an itinerant basis working with faculty, students, and interpreters at each of the other institutions. Only the more independent students attend other schools, since support services are very limited there.

Staff at St. Paul Technical Vocational Institute advised that a new program should begin on one campus and build a good track record before expanding to other campuses. A multi-institution arrangement can greatly reduce cost effectiveness because the interpreter to student ratio approaches one to one.

Implications. New federal guidelines for Section 504 of the Rehabilitation Act of 1973 require institutions that receive federal funds to serve all handicapped students who desire admission. A new program for deaf students can act as a resource for other community colleges, but should focus its efforts on developing quality support services at one institution for the first several years.

19. Could you give two suggestions for the administration of a new program for deaf students? Some suggestions:

(1) Have a person on the staff who is already familiar with the institution as a whole.

(2) Hire full-time, professional staff for all positions to allow maximum flexibility in scheduling.

(3) The program for deaf students should schedule classes requested by deaf students so that as many as possible are in the same section.

(4) Plan budget carefully and be sure of your funding sources.

(5) Have a strong and concentrated remedial program.

(6) Make sure that the administration and faculty are enthusiastic about serving the new students.

(7) Involve the community services program so that these needs of deaf people are met.

(8) The program director should be a 12-month employee.

(9) Clerical support is essential.

(10) Interpreter training on campus increases interaction of deaf and hearing students, supplies interpreters to the program, and provides practicum experience for aspiring interpreters.

(11) Interpreters should be able to interpret at many language levels.

(12) Hire instructional staff who are proficient in materials development.

(13) Build relationships with the institution by providing services in return- perhaps by teaching a class, sharing materials, etc.

(14) Prioritize support services and remember the counseling component.

(15) The program director should answer directly to the highest possible level of the institution's administration so that the interests of deaf students are not overlooked in college policy and goal formation.

20. What are some administrative problems you face? Several program directors mentioned that the necessity of performing multiple duties can get out of hand. For example, having one person serve as administrator of the program, counselor, and instructor is a severe overload. Some directors suggested that clear delineation of duties would help the situation. A common concern is that regular staff who are not familiar with deaf people usually do not realize how time consuming deaf students are to serve. For many deaf people, this is the first time they have had to compete with hearing students.

Another major problem cited was the maintenance of funding such programs. The writing of grants and project reports is time consuming and funding amounts fluctuate.

21. Is the location of your program a good one? Most programs were satisfied. Factors which contribute to satisfaction include:

(1) Interest of institution in having a program for deaf students.

(2) Large variety and number of occupational training programs as recommended in manpower report.

(3) Geographic location accessible to a large population.

(4) Supportive administrator(s) in appropriate position(s) (e.g. Instruction and Student Services).

(5) An instructional emphasis on serving individual needs of students.

(6) A large number of occupational programs which have a hands-on emphasis as well as some occupations which have a more theoretical base.

(7) Many occupational programs with certificate options.

(8) A strong developmental education - remedial education component.

(9) Availability of apartments and/or other housing nearby.

(10) Availability of interpreters in the area.

(11) Good instructional media, especially videotape.

22. If you could begin the program again, is there anything you would have done differently? Program directors who had been with the program since its inception answered this question. Most who answered said that they would have done a feasibility study first. Another would have instituted a Management By Objectives system. One director would have preferred program offices at a central place on campus, rather than on the outskirts.

23. What is the placement record of your program? Placement information was inconclusive. Some programs visited are too new to have meaningful data on this. Two of the older programs stated 90% and 94% successful placements. Two programs are oriented more toward transfer than toward occupational training and did not have data on placement. One program director said that his program's placement record was low: about 20-25%.

Implications. The existence of an occupational education program for deaf students does not automatically guarantee increased job opportunities. The staff of a program for deaf students should give special attention to placement personnel of the institution, so they become aware of ways in which they can help deaf students find jobs.

Some Students' Opinions

Time did not permit interviews with students at every postsecondary school visited. Ten students at five institutions were interviewed. Interviews took place wherever the researcher found students - in the program office, cafeteria, or outdoors on campus.

1. Why did you attend this postsecondary school? Many students liked staying close to home. As might be expected, the program's special support services play a major role in their choice of their respective colleges or other postsecondary schools, Other reasons given by students include the curriculum of the institution, their own general educational needs, and advantages in social life.

2. What is your major? Was it your first choice? Several students had not decided on a major and several had changed majors because their first choice was too difficult. [A summary of the Guide to College/Career Programs for Deaf Students shows that in 1975, the four most popular majors among deaf students were in Business and Office, Fine Arts and Humanities, Public Services, and Communications and Media (Rawlings and Trybus, 1976.)]

3. How do you get along with hearing students? Have you made friends among them? Of the ten students interviewed, three noted they had no really meaningful friendships among hearing students, four stated that they had both hearing and deaf friends, and three showed enthusiasm about their social relationships with hearing students. None of the students interviewed indicated negative feelings toward hearing students. The degree of interaction with hearing people is a very individual thing, but among the students interviewed, hostility and rejection by hearing students were not problems.

4. Do you get the help you need here? All students were satisfied with support services with two exceptions: one complained of the quality of some ot the interpreters' skills, and another mentioned difficulty in finding a tutor in one difficult subject.

5. Where do you live? Did you have problems in finding a place to live? None of the students who had to relocate reported having difficulty in finding a place to live. One started the program with apartment-finding assistance

from the program staff, and then found a more suitable place himself. (However, interviews with the staff members of several programs indicated that finding housing does cause problems for some deaf students.)

6. Do your instructors (aside from those in your special classes) seem to understand about deafness? More than half of the students interviewed were satisfied with faculty understanding of their handicap. Several students noted that some instructors had a better understanding of deafness than others, and often the problem is rapid lecturing and discussion.

7. Have any of your instructors learned to sign? According to these students' experiences, very few faculty learn to sign. Four of the ten students had encountered one faculty member who could sign, whereas the other six students interviewed have no instructors who can sign.

8. Do you have any advice for a new program for deaf students? Some students' answers:

(1) Have a strong preparatory course.
(2) Set up an integrated social club for deaf and hearing signers.
(3) Make sure that information about your program reaches deaf people.
(4) The teacher of special remedial classes should be a trained teacher of the deaf.
(5) Explain to deaf people about what college is like.

Administrators

Interviews with administrators of the overall institutions were conducted at four sites: Deans of two community colleges, the Assistant Director of an Adult School, and a Student Services Staff member in a technical institute. In all cases, those interviewed had been with the institution since the inception of the program for deaf students.

1. How would you assess the general attitude of the faculty and administration toward the program for deaf students? One respondent said that the institution was at first apprehensive about the program, but the quality of program staff and support services eased the faculty's fears and won their acceptance.

Another had the opposite experience in that faculty and staff were very enthusiastic at first, but after several years the novelty wore off. In this case, there was no ongoing in-service for faculty and staff. Orientation to the handicap cannot be a one-shot session.

The other two respondents said that the attitude among faculty and staff has been excellent since the beginning of the program.

2. If you could give advice to the administrator of a postsecondary institution with a new program for deaf students, what would you say? Administrators' Advice:

(1) Plan carefully in introductory stages, work with faculty's feelings of insecurity in dealing with a new type of student. In-service is a necessity. Let faculty talk with peers who have worked successfully with deaf students.

(2) The institution must make a commitment and have a policy regarding serving deaf students.

(3) The institution must realize that such programs do not make money. Full support services are necessary; removal of even one service can result in failure.

3. What are the assets of a program like this to your institution as a whole?

(1) Credibility as a comprehensive institution, especially in the community college.

(2) Public relations for a program for deaf students is a major advantage.

(3) Hearing students learn from attending classes with deaf students.

(4) Deaf students have made good employees, and have therefore been a positive reflection on the institution.

CONCLUSION:MAJOR ISSUES

The validity of the guidelines found in Principles Basic to the Establishment and Operation of Postsecondary Education for Deaf Students (CEASD,1973) was confirmed by this study. Certain major areas should be reiterated, since they are commonly misunderstood by people who are not familiar with deafness.

1. Postsecondary institutions must begin serving handicapped people. Section 504 of the Rehabilitation Act of 1973 (P.L. 93-112) prohibits discrimination against qualified handicapped students. The regulations for Section 504 are explicit and far-reaching, and should be studied by administrators in all postsecondary institutions. It is advisable for these institutions to become involved with handicapped citizens as soon as possible.

2. Characteristics of the institution serving deaf students will be a major determiner of the success of a program. Although support services offered were similar in all of the programs visited, differences in emphasis in the overall institutions enable individual programs to serve people with a wide variety of educational levels. In general, consciously or inadvertently, programs serve a certain band of the spectrum of abilities. For example, two community colleges visited have largely transfer-oriented deaf students with reading levels at or above seventh grade. St. Paul Technical Vocational Institute serves students of about average reading level for deaf people (third through sixth grade). The Valley Vocational Adult School's program

for deaf students serves students at first and second grade reading levels in their regular vocational programs. A sheltered workshop is also available there for multi-handicapped deaf individuals.

The institution must make the determination as to how much of the deaf population it can serve. The next phase of the feasibility study will attempt to match Maryland's postsecondary educational resources with the needs of Maryland's deaf people.

3. Services for deaf students are expensive. It is recommended that there be one community college program to serve the entire state, with an option for expansion if the need dictates.

The excess cost per deaf student in Maryland will depend on enrollment. Estimates given by program directors ranged from $1,800 to $3,700 excess cost per student per year. It must be noted that this cost is an investment, since tax dollars will be generated by graduates.

4. In a program for deaf students the ratio of students to staff will be drastically lower than for that of the general student body. More social and educational adjustments are required of deaf students than are required of hearing students. Many deaf students lack an awareness of career options and educational requirements for careers. Developmental and remedial instruction in language and math must be taught using special methods.

A limited number of staff must serve many functions. They must work with faculty, administration, deaf and hearing students, the deaf community, and many outside agencies. They must provide counseling, instruction, coordination, administration, new program development (e.g., sign language instruction and interpreter training), and faculty in-service.

There may be a great temptation to understaff a program because of small enrollments of deaf students, especially in the first few years. It is crucial that this tendency be avoided.

5. Personnel hired to staff a program for deaf students should be flexible and versatile. Because of the variety of duties they must perform, staff should have a strong background in deafness, both in training and experience. Personality factors must also be given strong consideration, since these individuals must be adaptable and have good human relations skills.

6. There is no flat achievement score that can be used as a criterion in evaluating deaf students' success. It would be arbitrary and misleading to give colleges the impression that a certain reading or math score can be a cut off for deaf students. Admissibility will depend on the college, the program in question, and all the abilities of each student as an individual. A college commitment to developmental education is an indicator that the institution may be suited for serving deaf students.

REFERENCES

Conference of Executives of American Schools for the Deaf. Principles Basic to the Establishment and Operation of Postsecondary Education for Deaf Students, 1973.

Rawlings, B.W. and Trybus, R.J. Update on postsecondary programs for hearing impaired students. American Annals of the Deaf, 1976, 121, 541-546.

Rawlings, B.W., Trybus, R.J., Delgado, G.L., and Stuckless, E.R. (Eds.) Guide to College/Career Programs for Deaf Students, Revised 1975 Edition. Gallaudet College N.T.I.D., 1975. CEASD, 1973.

APPENDIX A

Descriptions of Basic Support Services from

Principles Basic to the Establishment and Operation of Postsecondary Education for Deaf Students

by

the Conference of Executives of American Schools for the Deaf, 1973

Basic services follow:

1. Special classes for deaf students. This is defined as credit-bearing classes specifically for the deaf student as part of his program of study. While in many institutions the major portion of the deaf student's program of study may be in regular courses with hearing peers, there should be particular curricula designed specifically for the deaf student and his needs. It should be recognized that such offerings are an integral part of the student's program, and as such warrant credit. Normally, these classes should be developed and coordinated by a member of the program staff.

By the same token, some deaf students may have no need for a particular special class.

2. Tutoring. Where deaf students are sharing classes with hearing peers, individual tutoring support beyond that planned for hearing classmates, should be readily available to the deaf students.
3. Interpreting. Unless the instructor of the class in which the deaf student is enrolled incorporates manual communication fully into his instruction, or unless the deaf student is fully able to participate in the class independently, a qualified interpreter, skilled in both expressive and reverse interpreting, should be present at every class meeting. It also desirable, although not always possible, that the interpreter have knowledge of the subject for which he is interpreting.
4. Notetaking. The program should arrange to have present at each class in which hearing students take notes, a notetaker to prepare good notes for the deaf student. One alternative is to tape record and later transcribe into notes that can be used by the deaf student. The importance of the service is to provide clear, detailed documentation of the class content for future reference by the deaf student.
5. Vocational counseling. Generally offered by the program staff, counseling and other career development services should be specially designed and implemented as an ongoing program service to every deaf student.
6. Personal and social services. Counseling and other related services should be specially designed around the developmental needs of the deaf student. It is desirable also that in addition to the provision of opportunities to participate fully in regular student affairs, deaf students receive support in achieving self-identity as deaf people if they choose through their own student groups, dramatics, etc.
7. Vocational placement. Program emphasis should be given to vocational placement and follow-up. There is general recognition that many skilled deaf people are underemployed. It is less well recognized that unemployment among employable deaf adults runs as high as 21 percent. Assistance to the deaf graduate of the institution in locating satisfactory employment is vital, and as such merits special attention.
8. Speech and hearing services. Sometimes given only casual attention, speech and hearing services should be considered basic to a postsecondary program. Whether offered within the program or elsewhere in the institution or community, accurate and reliable diagnoses of the speech and hearing skills and potential of every entering deaf student should be obtained, and if indicated by qualified persons, clinical services rendered to each deaf student on an ongoing basis.
9. Communication training for deaf students. Deaf students entering the institution will vary considerably in their skills at expressing and receiving language through manual communication. It is likely that all will profit from instruction, varying from basic signs through technical signs useful in their particular programs of study. Whether optional or required, one or more courses in manual communication should be routinely available to deaf students.
10. Communication training for instructors. Those instructors who will depend upon interpreters to relay information to and from deaf students in their classes should be oriented to features of manual communication as a minimum. Those expected to incorporate manual communication into their own instruction should participate intensively in training activities scheduled for them. Other aspects of communicating with the deaf should also be included, e.g. basic techniques for helping the student speechread more effectively.
11. Supervised housing. Of all the basic services, this is probably the most variable, and probably the most difficult to deal with as a principle. Some programs draw deaf students from the immediate locale, and these students reside at home. Some, where the institution does not provide its own housing, depend upon the local community to accommodate non-commuting deaf students. Still others avail themselves of on-campus housing.

Historically, most postsecondary institutions assumed a measure of responsibility for supervising the living styles of non-commuting students. This responsibility has recently been severely challenged.

While every postsecondary institution subscribes to the concept of fostering independence among its students, the deaf student is often not equipped, in late adolescence, for coping independently with his environment. At very least the institution and program in which the non-commuting student enrolls should specify its responsibility and authority for supervising housing for deaf students. More positively it should state how its services support the student's personal/social growth toward mature, responsible independence.

APPENDIX B

Information on Programs Visited

from

A Guide to College/Career Programs for Deaf Students

Revised 1975 Edition

Rawlings, B. et. al. Eds., 1975

(Nine of the eleven programs visited are included in the Guide).

5

GOLDEN WEST COLLEGE
Hearing Impaired Program & Disabled Student Services
Huntington Beach, California

Program Director: Paul M. Culton, Chairman

For information contact:
Paul M. Culton, Chairman
15744 Golden West Street
Huntington Beach, California 92647
Telephone: 714-892-7711 extension 621

Program established: 1970

Major emphasis: Technical/Vocational and Liberal Arts

Full-time enrollment: Total—4,730
Deaf— 61 (45 additional part-time students)
(Percentage of deaf students from outside the state—2%)

Annual costs:

	State Residents	Out-of-State Residents
Tuition	None	$31/unit
Other Student Fees	$7/semester	7/semester

Type of institution: Public, Community College District

Accreditations: Western Association of Schools & Colleges

Degrees awarded to date to deaf students:
2 Certificate/Diplomas
34 Associate Degrees

Degrees awarded in 1975 to deaf students:
1 Certificate/Diploma
17 Associate Degrees

Preparatory activities:

Preparatory program is available but scope of activities and hours of attendance are not reported.

Special services:

- **Yes**—*Special classes for deaf students*
- **Yes**—*Interpreters in regular classes*
- **Yes**—*Tutoring services*
- **Yes**—*Notetaking services*
- **Yes**—*Vocational development services*
- ***No**—*Manual communication training for deaf students*
- **Yes**—*Manual communication training for instructors*
- **Yes**—*Personal counseling services*
- **Yes**—*Social/cultural activities*
- **Yes**—*Vocational placement services*
- **Yes**—*Speech & Hearing services*
- **No**—*Supervised housing*

*Available but not required.

Major areas of study of deaf students during the 1974-75 academic year:

Accounting(1)
Audio-Visual(1)
Baking(1)
Carpentry(1)
Computer(3)
Dental Technology(3)
Drafting(4)
General Interest(38)
Graphics(5)
Graphics/Art Design(3)
High School Diploma(2)
Instructional Aide(3)
Liberal Arts(44)
Manufacturing Technology(2)
Medical Technician(1)
Office Technician(4)
Power Sewing(1)
Surveying(1)
Tailoring(1)
Undecided(26)

LOS ANGELES PIERCE COLLEGE
Special Services
Woodland Hills, California

Program Director: Margaret Y. De Nevers, Director

For information contact:
Margaret Y. De Nevers, Director
6201 Winnetka Avenue
Woodland Hills, California 91364
Telephone: 213-347-0551 extension 208

Program established: 1974

Major emphasis: Liberal Arts and Technical Vocational

Full-time enrollment:
Total—20,584
Deaf— 29 (23 additional part-time students)
(Percentage of deaf students from outside the state—0%)

Annual costs:

	State Residents	Out-of-State Residents
Tuition	None	$34/unit
Other Student Fees	$2-6	2-6

Type of institution: Public, Community College District

Accreditations:
Western Association of Schools & Colleges
National League of Nursing

Degrees awarded to date to deaf students: None

Degrees awarded in 1975 to deaf students: None

Preparatory activities:

An optional preparatory program is available and students attend for 3-21 clock hours per week for 1 semester to 4 semesters, depending on the need.

The program includes courses in reading-English, personal & vocational planning and mathematics.

Special services:

- **Yes**—*Special classes for deaf students*
- **Yes**—*Interpreters in regular classes*
- **Yes**—*Tutoring services*
- **Yes**—*Notetaking services*
- **Yes**—*Vocational development services*
- **Yes**—*Manual communication training for deaf students*
- **Yes**—*Manual communication training for instructors*
- **Yes**—*Personal counseling services*
- **Yes**—*Social/cultural activities*
- **Yes**—*Vocational placement services*
- **Yes**—*Speech & Hearing services*
- **No** —*Supervised housing*

Major areas of study of deaf students during the 1974-75 academic year:

Information not reported.

8

PASADENA CITY COLLEGE
Hearing Impaired Program
Pasadena, California

Program Director:	Lucille V. Miller, Coordinator
For information contact:	Lucille V. Miller, Coordinator 1570 East Colorado Boulevard Pasadena, California 91106 Telephone: 213-578-7488
Program established:	1972
Major emphasis:	Liberal Arts and Technical Vocational
Full-time enrollment:	Total—12,000 Deaf— 30 (10 additional part-time students) (Percentage of deaf students from outside the state—5%)

Annual costs:

	State Residents	Out-of-State Residents	Foreign Residents
Tuition	None	$570/semester	$210/semester

Type of institution:	Public, County/City governed
Accreditations:	Western Association of Schools & Colleges
Degrees awarded to date to deaf students:	2 Certificate/Diplomas 3 Associate Degrees
Degrees awarded in 1975 to deaf students:	1 Certificate/Diploma 1 Associate Degree

Preparatory activities:

Preparatory program is available and the students may attend for 8 to 12 clock hours.

Topics covered in the program are reading improvement, writing skills, computational skills and social relations.

Special services:

Yes—*Special classes for deaf students*
Yes—*Interpreters in regular classes*
Yes—*Tutoring services*
Yes—*Notetaking services*
Yes—*Vocational development services*
Yes—*Manual communication training for deaf students*
Yes—*Manual communication training for instructors*
Yes—*Personal counseling services*
Yes—*Social/cultural activities*
Yes—*Vocational placement services*
Yes—*Speech & Hearing services*
No —*Supervised housing*

Major areas of study of deaf students during the 1974-75 academic year:

Academic Transfer(3)
Art(2)
Auto Mechanics(3)
Bookkeeping-Accounting(2)
Clerical-Office Machines(3)
Dental Laboratory Technician(1)
Education Associate(2)
Food Service(1)
General Studies(14)
Library Technician(1)
Machine Shop(1)
Metal Processes(1)
Printing(2)
Sign Art(1)
Telecommunications(3)

9

RIVERSIDE CITY COLLEGE
Program for the Deaf
Riverside, California

Program Director: William E. May, Coordinator

For information contact:
William E. May, Coordinator
4800 Magnolia Avenue
Riverside, California 92506
Telephone: 714-684-3240

Program established: 1960

Major emphasis: Technical/Vocational

Full-time enrollment:
Total—4,857
Deaf— 24 (2 additional part-time students)
(Percentage of deaf students from outside the state—0%)

Annual costs:

	State Residents	Out-of-State Residents
Tuition	None	$30/unit
Other Student Fees	$4	4

Type of institution: Public, County/City governed

Accreditations: Western Association of Schools & Colleges

Degrees awarded to date to deaf students:
2 Certificate/Diplomas
46 Associate Degrees

Degrees awarded in 1975 to deaf students:
1 Certificate/Diploma
2 Associate Degrees

Preparatory activities:

Preparatory program is available and students concentrate on academic classes offered in the separate classes taught by the Total Communications method with one or two electives available. This is normally a one-year course to bring the student's academic achievement up to freshman qualification standards.

Special services:

Yes—*Special classes for deaf students*
Yes—*Interpreters in regular classes*
Yes—*Tutoring services*
Yes—*Notetaking services*
No —*Vocational development services*
Yes—*Manual communication training for deaf students*
No —*Manual communication training for instructors*
Yes—*Personal counseling services*
Yes—*Social/cultural activities*
No —*Vocational placement services*
No —*Speech & Hearing services*
No —*Supervised housing*

Major areas of study of deaf students during the 1974-75 academic year:*

Automotive Technology
Business-General
Data Processing
Electronics
Instructional Aide
Resident Counselor
Secretarial
Transfer Program

*Number of students in each major not reported.

1

VALLEY VOCATIONAL ADULT SCHOOL
Deaf Program
Industry, California

Program Director: Jean VanKeuren, Coordinator

For information contact:
Jean VanKeuren, Coordinator
15359 East Proctor
City of Industry, California 91744
Telephone: 213-968-4638
TTY: 213-333-4016

Program established: 1970

Major emphasis: Technical/Vocational

Full-time enrollment:
Total—10,000
Deaf— 102
(Percentage of deaf students from outside the state—3%)

Annual costs:

	State & Out-of-State Residents
Tuition	$5
Other Student Fees	2

Type of institution: Public, State governed

Accreditations: Western Association of Schools & Colleges

Degrees awarded to date to deaf students: 300 Certificate/Diplomas

Degrees awarded in 1975 to deaf students: 38 Certificate/Diplomas

Preparatory activities:

Preparatory program is available and students attend for 3 clock hours.

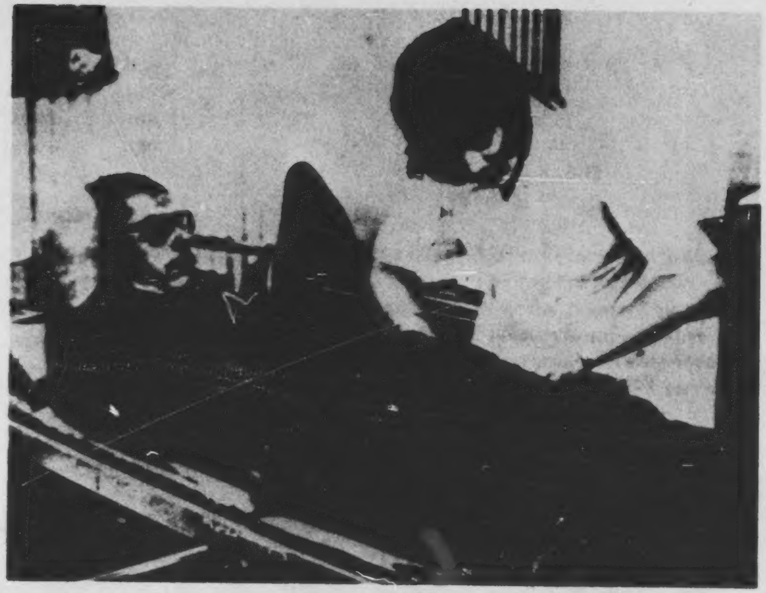
This is a remedial reading program.

Special services:

- **No** —*Special classes for deaf students*
- **Yes**—*Interpreters in regular classes*
- **Yes**—*Tutoring services*
- **No** —*Notetaking services*
- **Yes**—*Vocational development services*
- **Yes**—*Manual communication training for deaf students*
- **Yes**—*Manual communication training for instructors*
- **Yes**—*Personal counseling services*
- **No** —*Social/cultural activities*
- **Yes**—*Vocational placement services*
- **No** —*Speech & Hearing services*
- **No** —*Supervised housing*

Major areas of study of deaf students during the 1974-75 academic year:

Auto Body Repair(8)
Auto Mechanics(4)
Brake & Wheel Alignment(4)
Bookkeeping & Business Machines(8)
Clerical(3)
Key Punch(18)
Landscape Gardening(12)
Motorcycle Repair(2)
Nurses' Aide(6)
Power Sewing(10)
Typing(10)
Upholstery(10)
Welding(7)



ST. PAUL TECHNICAL VOCATIONAL INSTITUTE
Program for Deaf Students
St. Paul, Minnesota

Program Director: Robert Lauritsen, Director

For information contact:
Roger Reddan, Counselor
235 Marshall Avenue
St. Paul, Minnesota 55102
Telephone: 612-227-9121 extension 281

Program established: 1969

Major emphasis: Technical/Vocational

Full-time enrollment:
Total—2,000
Deaf— 110 (10 additional part-time students)
Percentage of deaf students from outside the state—92%)

Annual costs:

	State & Out-of-State Residents
Tuition*	$ 870
Other Student Fees	125
Room & Board	1,800
Application Fees	10

*Minnesota residents under age 21 do not pay tuition.

Type of institution: Public, City governed

Accreditations: Minnesota Department of Education

Degrees awarded to date to deaf students: 314 Diplomas

Degrees awarded in 1975 to deaf students: 61 Diplomas

Preparatory activities:

Preparatory program is available and students attend for 360 clock hours (12 weeks).

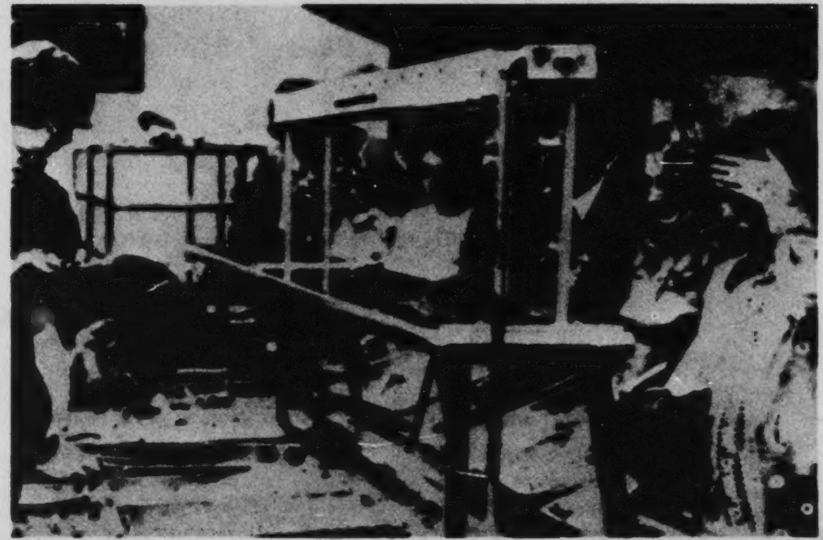
The program is designed to provide the students with further academic studies and vocational exploration which are directly related to major vocational technical programs offered. Courses are offered in Communications, Math, Personal Management, Occupational Information, Vocational Exploration, Family Management & Health, and Formulas.

Special services:

Yes—*Special classes for deaf students*
Yes—*Interpreters in regular classes*
Yes—*Tutoring services*
Yes—*Notetaking services*
Yes—*Vocational development services*
Yes—*Manual communication training for deaf students*
Yes—*Manual communication training for instructors*
Yes—*Personal counseling services*
Yes—*Social/cultural activities*
Yes—*Vocational placement services*
Yes—*Speech & Hearing services*
Yes—*Supervised housing*

Major areas of study of deaf students during the 1974-75 academic year:

Apparel Arts(2)
Auto Body(3)
Auto Mechanics(1)
Cabinetmaking(6)
Cafeteria Service Work(1)
Carpentry(1)
Dental Technician(3)
Design Technology(3)
Electro-Mechanical Technology(2)
General Office Practice(14)
Graphic Arts(12)
Hotel & Restaurant Cook(1)
Janitorial Sciences(1)
Keypunch(3)
Licensed Practical Nurse(1)
Machine Tool Processes(18)
Medical Laboratory Assistant(2)
Optical Technician(3)
Painting & Decorating(2)
Photography(1)
Production Art(1)
Public Administration(1)
Sheetmetal(1)
Tool & Die(2)
Welding(6)



23

COMMUNITY COLLEGE OF PHILADELPHIA
Program for Hearing Impaired Students
Philadelphia, Pennsylvania

Program Director: Aram L. Terzian, Director of Services to Handicapped Students

For information contact:
Aram L. Terzian, Director of Services to Handicapped Students
34 South 11th Street
Philadelphia, Pennsylvania 19107
Telephone/TTY: 215-209-1291

Program established: 1972

Major emphasis: Technical/Vocational

Full-time enrollment: Total—4,200
Deaf— 12 (2 additional part-time students)
(Percentage of deaf students from outside the state—0%)

Annual costs:

	State Residents	Out-of-State Residents
Tuition	$450	$1,350
Other Student Fees	34	34
Application Fees	10	10

Type of institution: Public, County/City governed

Accreditations: Middle States Association of Colleges & Secondary Schools

Degrees awarded to date to deaf students: 1 Associate Degree

Degrees awarded in 1975 to deaf students: None

Preparatory activities:

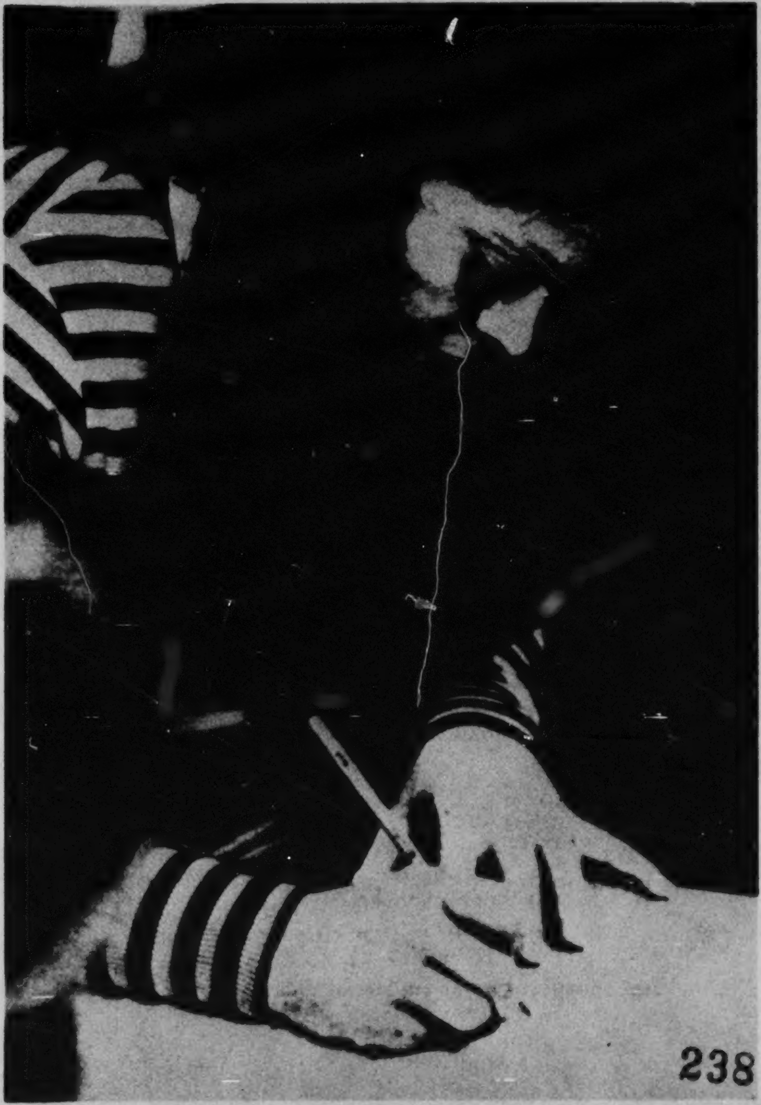
There are no preparatory activities coordinated by the program for the deaf.

Special services:

No —*Special classes for deaf students*
Yes—*Interpreters in regular classes*
Yes—*Tutoring services*
Yes—*Notetaking services*
Yes—*Vocational development services*
Yes—*Manual communication training for deaf students*
No —*Manual communication training for instructors*
Yes—*Personal counseling services*
No —*Social/cultural activities*
***No** —*Vocational placement services*
No —*Speech & Hearing services*
No —*Supervised housing*

Major areas of study of deaf students during the 1974-75 academic year:

Accounting(2)
Arts & Science(2)
Data Processing(1)
Developmental Education(7)
Library Technology(1)
Mental Health/Social Service(1)



EASTFIELD COLLEGE
Services for Handicapped Students
Mesquite, Texas

Program Director: Elizabeth Fetter, Coordinator

For information contact:
Elizabeth Fetter, Coordinator
3737 Motley Drive
Mesquite, Texas 75149
Telephone: 214-746-3247

Program established: 1972

Major emphasis: Technical/Vocational

Full-time enrollment: Total—2,917
Deaf— 10 (2 additional part-time students)
(Percentage of deaf students from outside the state—0%)

Annual costs:

	District Residents	State Residents	Out-of-State Residents
Tuition	$75/12 hours	$208/12 hours	$480/12 hours

Type of institution: Public, County/City governed

Accreditations: Southern Association of Colleges & Schools

Degrees awarded to date to deaf students:
4 Certificate/Diplomas
3 Associate Degrees

Degrees awarded in 1975 to deaf students: 2 Associate Degrees

Preparatory activities:

An orientation program is available and students attend for 9 clock hours per week.

Special services:

- **Yes**—*Special classes for deaf students*
- **Yes**—*Interpreters in regular classes*
- **Yes**—*Tutoring services*
- **Yes**—*Notetaking services*
- **Yes**—*Vocational development services*
- **Yes**—*Manual communication training for deaf students*
- **Yes**—*Manual communication training for instructors*
- **Yes**—*Personal counseling services*
- **Yes**—*Social/cultural activities*
- **Yes**—*Vocational placement services*
- **No** —*Speech & Hearing services*
- **No** —*Supervised housing*

Major areas of study of deaf students during the 1974-75 academic year:

Arts & Science(1)
Auto Mechanics(1)
Business(1)
Computer Programming(1)
Developmental Studies(3)
Graphic Arts(1)
Physical Education(1)
Training Paraprofessional with Deaf(1)

TARRANT COUNTY JUNIOR COLLEGE DISTRICT
Service Center for Opportunities to Overcome Problems
Fort Worth, Texas

Program Director: Joan Fernandes, Director

For information contact:
Joan Fernandes, Director
828 Harwood Road
Hurst, Texas 76053
Telephone: 817-281-7860

Program established: 1971

Major emphasis: Technical/Vocational

Full-time enrollment:
Total—15,666
Deaf— 11 (5 additional part-time students)
(Percentage of deaf students from outside the state—0%)

Annual costs:

	Local Residents*	State Residents*	Out-of-State Residents
Tuition	$4/hour	$7/hour	$40/hour
Other Student Fees	1/hour	1/hour	1/hour
Application Fees	5	5	5

*Upon certification of the appropriate state vocational rehabilitation agency, tuition fees may be waived.

Type of institution: Public, County/City governed

Accreditations: Southern Association of Colleges & Schools, American Medical Association, American Dental Association

Degrees awarded to date to deaf students:
2 Certificate/Diplomas
3 Associate Degrees

Degrees awarded in 1975 to deaf students: 1 Associate Degree

Preparatory activities:

There are no preparatory activities coordinated by the program for the deaf.

Special services:

- **No**—*Special classes for deaf students*
- **Yes**—*Interpreters in regular classes*
- **Yes**—*Tutoring services*
- **Yes**—*Notetaking services*
- **Yes**—*Vocational development services*
- **Yes**—*Manual communication training for deaf students*
- ***Yes**—*Manual communication training for instructors*
- **Yes**—*Personal counseling services*
- **Yes**—*Social/cultural activities*
- **Yes**—*Vocational placement services*
- **No**—*Speech & Hearing services*
- **No**—*Supervised housing*

*Not required

Major areas of study of deaf students during the 1974-75 academic year:

Accounting(1)
Data Processing(1)
Drafting & Design(2)
Media Technology(1)
Physical Education(1)
Secretarial(1)
Teacher Assistant(1)
Technical Illustration(1)
Undecided Majors(4)

APPENDIX C

Forms and Other In-House Documents Supplied by Programs for Deaf Students

Courtesy of Eastfield College, Services
for Handicapped Students

INTERPRETERS SALARY INCREMENT REPORT

INTERPRETERS NAME: ______________________ TOTAL SCORE: ______

DATE: ____________________ PAY RATE: _______

PRIOR EXPERIENCE

1 Community
2 Classroom
3 College

EVALUATIONS

0 None
1 Local
2 State
3 Partial RID
4 RID CSC

EDUCATION

1 High School or CED
2 College Credits (30)
3 A.A. or equivalence
4 B.A. or equivalence

CLASSROOM HOURS

0 0-149
1 150-249
2 250-349
3 350-449
4 450 or more

ETHICS

0 None
1 Limited-very little knowledge
2 Fair-little knowledge and following
3 Average-good knowledge and following
4 Above Average-Excellent knowledge & following

COOPERATION

0 Never follows staff procedures
1 Sometimes follows staff procedures
2 Most of the time follows staff procedures
3 Conscientiously follows staff procedures

EXPRESSIVE INTERPRETING

1 Limited-one to one
2 Fair-Lab situation
3 Average-Most lecture
4 Above Average-Heavy lecture
5 Any situation

EXPRESSIVE TRANSLATING

1 Limited-one to one
2 Fair-Lab situation
3 Average-Most lecture
4 Above Average-Heavy lecture
5 Any situation

REVERSE SKILLS

1 Limited-very little understanding
2 Fair-understanding & then reversing
3 Average-Slow signed English or Ameslan-Simultaneous
4 Above Average-Normal speed-Simultaneous
5 Highly Skilled-Any speed or level

IN-SERVICE

0 None
1 2 approved workshops or in-service
2 4 approved workshops or in-service
3 6 approved workshops or in-service
1/2 for each additional approved workshops or in-services. At this time a maximum of 7 points will be considered for pay increment.

0-9	$3.50	14-17	$4.50	22-25	$5.50	31-38	$6.50	
10-13	$4.00	18-21	$5.00	26-30	$6.00	39	$7.00	plus 50¢ per year up to $8.50

Courtesy of Eastfield College, Services for Handicapped Students

GENERAL PROCEDURES

As an interpreter you are responsible for knowing the following code of ethics as outlined by the Registry of Interpreters for the Deaf.

CONFIDENTIALITY

Interpreters are expected to view all information from an interpreting situation as confidential.

CENSORING

Interpreters never have the right to censor what is said. Deaf and hearing persons should have equal access to the same information right down to the curse words.

APPEARANCE

The interpreter should be careful of personal appearance.

1. Men should avoid shaggy beards or moustaches.
2. Women should avoid heavy make-up, excessive jewelry, rings, bracelets or very long fingernails. Hair should be back off the face.

Here at Eastfield we will require that all interpreters wear a navy blue smock which can be purchased at a uniform shop. The purpose of these smocks will be to:

1. Provide a solid background for signing.
2. Reinforce the differentiation between you as a person and you as an interpreter.

WHAT IS EXPECTED OF AN INTERPRETER AT EASTFIELD

1. INTERPRETER ABSENCES: Interpreters are responsible for notifying the SHS office at least 24 hours in advance of any assignment they are unable to fill. 746-3297 (TTY or Voice)
2. STUDENT TARDY: Should a deaf student not show up at the beginning of the class the interpreter waits 15 minutes for a 1 hour class and 20 minutes for a 1 1/2 hour class. If the student calls us to inform us that he will be late the interpreter should remain in class until he or she arrives.
3. STUDENT NO SHOW: If a student does not show up for class without notification, the interpreter is to contact the office and complete a "NO SHOW" form. The interpreter will be paid for the class but should not return to the class until notified by the SHS Office.
4. ADDITIONAL SERVICE: If a deaf student or teacher requests additional services from the interpreter the deaf student should be referred to the SHS Office where the assignment will be made. It is not the responsibility of the interpreter to request special services. Any interpreting assignment that is not channeled through the SHS Office will not be paid for by the SHS Office.

5. PUNCTUALITY: Interpreters should be punctual. Always be in class on time or preferably a little early, especially on the first day of class or when subbing ... to introduce yourself to the instructor and student.

6. DELIVERY: The philosophy of Eastfield is total communication. When interpreting always mouth, without voice, the spoken words.

7. HANDLING QUESTIONS: Questions from the deaf student should always be directed to the teacher and questions from the teacher directed to the student. The function of the interpreter is to expressively and receptively transmit questions and NEVER answer the questions themselves.

8. PUBLIC RELATIONS: Because interpreters often serve as public relations persons for the office, it is important for interpreters to be considerate of those people who do not understand the needs of deaf people. Use those opportunities to educate them on deafness. You are an extension of the office and will be questioned frequently about the services. Be knowledgeable in the field of deafness and able to refer a person to the office appropriately. Resources you should be familiar with are:

FUNCTION	PROGRAM	NAMES	PHONE
Curriculum	TPD		
	Secretary		
Supportive Services	Services for Handicapped Students		
	Secretary		
Contracts Services	TRC		

9. TRAINING: The interpreters are encouraged to attend short term workshops. The purpose is to better equip the interpreter to meet the needs of every situation. For professional growth interpreters are strongly encouraged to join their professional organizations and to get involved in significant issues regarding the emerging professionalism of interpreting. Interpreters should seek certification as personal skills develop.

Courtesy of Golden West College, Hearing
Impaired Program

10th
Anniversary
A Decade of Service 1966-1976

HEARING IMPAIRED PROGRAM

Since Golden West College first opened its doors in September 1966, it has been reaching out to serve the entire community. In 1970, that sense of purpose led the College to welcome hearing impaired people to both its student body and its faculty, making Golden West a pioneer among colleges serving deaf students. Today there are more than 100 hearing impaired students in a total enrollment of over 20,000.

The Students. From the very beginning, deaf and hard of hearing students have taken an active and successful role in campus life. Many have earned places on the Dean's List, with a few even qualifying for scholarship awards based upon academic achievement and leadership. In addition, some hearing impaired students have won the acclaim of the student body of the entire College by getting themselves elected to student government and other positions. Others have distinguished themselves in varsity sports or in drama. And every year a number of Golden West hearing impaired students volunteer their services to schools and other agencies in the surrounding community.

The Silent Rustlers basketball team, made up of Golden West College deaf players, plays over twenty games each season and holds its own against teams with older and taller players, and which represent much larger organizations.

The Deaf Educational Activities Forum is an organization for hearing impaired students which concerns itself primarily with leadership development. The D.E.A.F. has been active in welcoming new deaf students to the campus and in forging links with other student organizations. The club is also involved in raising funds for a community interpreter service offered through the Greater Los Angeles Council on Deafness.

The Staff

The Advisory Committee of the Hearing Impaired Program began in the late 1960's when a group of educators, a rehabilitation counselor, an interpreter, several deaf citizens, and parents of hearing impaired teenagers urged Golden West College to establish one of the first locally supported community college programs for the deaf in United States history. The College responded with enthusiastic support, and the Hearing Impaired Program was born. The present Advisory Committee has the same general makeup as the original committee, including some of the original members.

The Chairman of the Hearing Impaired Program has the oversight of the entire operation of the program. His primary background is in teaching the deaf, but he is also qualified in interpreting and counseling. In addition to his teaching and supervisory duties for deaf and hard of hearing students, he also oversees reading and other services for blind students and helps to accommodate other disabled students on the campus. The Chairman represents the College in coordinating its efforts with other educational and service agencies that assist disabled people.

GOLDEN WEST COLLEGE

15744 GOLDEN WEST STREET • HUNTINGTON BEACH • CALIFORNIA • (714) 892-7711

The Guidance Specialist recruits, tests, and advises new students. He also provides personal, academic, and vocational counseling for all students. He acts as registrar for the program. In addition, he coordinates the academic advisement of students by the Educational Specialists and maintains student records. Liaison with the College's counseling staff is another of the Guidance Specialist's duties.

The Educational Specialists are fully credentialed teachers of the deaf who teach remedial courses in English, reading, personal development, and vocational planning for hearing handicapped students. They also work with other faculty in certain courses of the regular College curriculum and provide individual instruction where necessary for deaf students enrolled in regular classes. Since mainstreaming is part of the Program's philosophy, separate remedial courses for hearing impaired students have been limited to a minimum number. In addition to their teaching duties, Educational Specialists also perform other functions, such as supervising notetaker, tutorial, or speech therapy services, sponsoring student organizations, administering the weekly captioned films or the student loan program, providing information about deafness or about the Hearing Impaired Program to community groups and the general public, and assisting the College faculty and staff in serving hearing impaired students.

The Interpreters are the backbone of the Hearing Impaired Program. The Lead Interpreter coordinates services provided by two other full-time interpreters and fifteen to twenty part-time interpreters. In addition to their classroom duties, interpreters make phone calls for students, assist at student-teacher conferences, and facilitate communication for students with health services and all other college personnel. Interpreting services are also provided for certain educational and cultural events at the college, as well as some meetings attended by deaf and hard of hearing students. For the deaf community, the Golden West College interpreting staff cooperate with the Greater Los Angeles Council on Deafness to provide for off-campus needs of deaf people who cannot afford their own interpreters. This service also involves interpreters not employed at the College.

The other personnel of the Hearing Impaired Program include a full-time secretary and student clerical assistants, professional and volunteer tutors, and notetakers. Also graduate speech majors from a nearby university assist the Program's speech therapist.

Other Disability Groups

For the small number of blind students at Golden West College, reader services are provided, frequently with support from the California Department of Rehabilitation.

There are also a few orthopedically handicapped students on the Golden West campus. Architectural barriers are being removed with the advice and participation of the health services staff and the disabled students themselves. Orthopedically handicapped students are also actively involved helping students who belong to other disability groups.

In addition to the disability groups already mentioned, the Hearing Impaired Program has also served speech handicapped students and deaf-blind students.

Additional Services

A community referral service is offered. Deaf inquirers are given information about what community resources are available to serve their needs and how to take advantage of those resources. Callers may also ask for sources of information about any aspect of deafness or the deaf community. For information that can't be supplied directly, referrals are made to other sources.

Several financial aid programs are available to hearing impaired students at Golden West. First, there is a loan fund provided by the Hearing Impaired Program; the funds were raised by the students themselves, via plays, sales and other activities. There are also the Carl Ayling Scholarships and others donated by private citizens. And, of course, deaf students have access to all other aid programs that are open to students in general.

A TTY (a special teletype device) is available to permit deaf students to communicate by telephone without the intervention of an interpreter. For the hard of hearing students there is a telephone with a special amplifier built in.

KOCE-TV, the community's own educational television station (UHF channel 50 in Orange County) is located on the Golden West College campus. Through its close liaison with the Hearing Impaired Program, it provides captions on special TV programs and occasionally airs shows of special importance to people interested in deafness.

Each semester the college publishes The Nugget, a newsletter about the Hearing Impaired Program, its students, and their activities. Any interested party, upon notifying the H.I.P., will be placed on the subscription list, free of charge.

These and other services are provided by Golden West College and the Hearing Impaired Program. More information may be obtained from

Paul M. Culton, Chairman
Hearing Impaired Program
Golden West College
15744 Golden West Street
Huntington Beach, CA 92647
Phones 714/892-7711, x 621 (voice)
714/892-7854 (TTY).

Courtesy of Golden West College,
Hearing Impaired Program

LEARNING SKILLS 040
STUDY SKILLS

Learning Skills 040, Study Skills, is an open-ended class permitting students to begin at any time, provided enough days to complete a worthwhile amount of work remain in the semester. After one introductory orientation session with an instructor (group meetings are held the first two days of the semester and individual appointments thereafter), students work independently in an open lab under the direct supervision of a 40 hour per week paraprofessional instructional associate and under the indirect supervision of the instructor. They attend at their convenience a minimum of 3 hours per week, completing no more than one lesson per day. Students may enroll for any number of units (non-transferrable) from 1/2 to 2 in half unit increments. If a student enrolls for 2 units, he must attend a minimum of 4 hours (distributed over 4 days) per week. Students who register later in the semester may not enroll for the maximum number of units and may have to attend more than the minimum number of hours (but never more than 5 per week--one per day) depending upon the time remaining in the semester. Each 1/2 unit of credit requires a minimum of 12 attendance hours plus completion of individually prescribed objectives (see attached contracts and objectives). Although the student may enroll for more than 1/2 unit, he contracts for only 1/2 unit of work at a time; thus, each 1/2 unit of work requires approximately 12 days to complete. All students contract for the same first 1/2 unit (Contract #1 attached). After that, and for additional units, each student selects what he wishes from the remaining lessons (Contract #2, 3, 4 attached). The Study Skills course offers the student the option of either a letter grade or credit/no credit.

Paperwork for each lesson (although the student pretty much knows how well he has done as he progresses through a lesson) is scored at the end of each day and is available for collection by 8:00 a.m. the next morning. Students do not continue to a succeeding lesson until they have corrected their work and received a satisfactory score: therefore, the 12-hours-per-half-unit requirement is only approximate.

Although there is no prerequisite to this course, students whose reading abilities are much below the tenth grade level will usually experience considerable difficuty, especially since most of the sample materials used are selected from college textbooks. In this case, these students are counseled out of Study Skills and into a reading class.

Approximately 90 percent of the instruction in Study Skills is offered via an audio-visual learning system (tapes, slides, handouts, etc.). Most materials used in this course are "home-made" and not available for purchase. A listing of all equipment and materials is enclosed in the information packet.

COURSE DESCRIPTION

Learning Skills 040 STUDY SKILLS 1/2 - 2 Units

A course designed to help the student develop individual competency in (1) studying college textbooks; (2) note-taking; (3) exam-taking; (4) efficient time management; and (5) critical listening. Lectures, demonstrations, and exercises are integrated into an audio-visual learning system. The student must attend a minimum of three hours per week (maximum five) and satisfactorily complete all objectives required for the number of units he enrolls in. Successful completion of 12 hours of course work equals 1/2 unit of credit. Enrollment open all semester. Students beginning later in the semester will not be eligible for the maximum number of units. Those enrolling for fewer than two units will complete the course in less than a semester. May be repeated for credit until a maximum of two units is reached. Optional credit/no credit or grade.

STUDY SKILLS OBJECTIVES

Courtesy of Golden West
College, Hearing Impaired
Program

500B

PROGRAM PLANNING/ORIENTATION

Given several group orientation sessions from which to choose or a taped orientation session or an individual orientation appointment with the instructor, the student will, before beginning any portion of the study skills program: (1) complete at least one of the types of orientations in which he receives information regarding the organization, operation, and requirements of the course, and (2) fill out his first contract specifying the work he will complete and the conditions under which it will be completed. In the case of the group orientation, the student will attend at one of the hours indicated in the schedule of classes. In the case of the taped orientation, the student will listen to the tape in the Learning Skills Center. In the case of the individual orientation with the instructor, the student will sign up for and attend a 30-minute conference at any open hour on the instructor's schedule. (The only grade possible on this objective is an A.)

400A U-1-T-1A

INTRODUCTION TO TERMS

Having been given a tape program, a set of slides, a notebook, and a Study Guide to illustrate and explain various terms and textbook parts, the student will (1) listen to the program, (2) participate in the practice, and (3) submit at the end of the lesson the Study Guide with a minimum of 80 percent of the correct information inserted.

400B U-1-T-1

SURVEY

Having been given a tape program, a set of slides, a notebook and a Study Guide to illustrate and explain the use of SURVEY techniques in reading and in the SPQ3R reading system and to provide practice in the use of SURVEY, the student will (1) listen to the program, (2) participate in the practice, and (3) submit at the end of the lesson the Study Guide with a minimum of 80 percent of the correct information inserted.

401. U-1-T-2

SURVEY - (Supplementary)

Having been given a tape program, a notebook, and 2 handouts to provide review and practice of SURVEY techniques, the student will (1) listen to the program, (2) participate in the practice covered on the tape and in the notebook, and (3) submit at the end of the lesson the two handouts with a minimum of 80 percent of the correct information inserted and/or marked.

402. U-1-T-3

PURPOSE

Given a tape program, a set of slides and a Study Guide to explain and illustrate the PURPOSE step in the SPQ3R reading system, the student will (1) listen to the program, (2) examine the illustrations, and (3) submit at the end of the lesson the Study Guide with a minimum of 70 percent of the correct information inserted.

1/75 OVER

403.

U-1-T-4

QUESTION

Given a tape program, a set of slides, a notebook, a handout, and a Study Guide to explain and illustrate the QUESTION step in the SPQ3R reading system and the use of the questioning technique in reading; the student will (1) listen to the program; (2) examine the illustrations; (3) participate in the exercises provided in the lesson; (4) submit at the end of the lesson the article accompanying the notebook to which he has added his own questions based on the title, the sub-title, the introduction, and each of the headings; and (5) submit at the end of the lesson the Study Guide with a minimum of 70 percent of the correct information inserted.

404.

U-1-T-5A

REVIEW OF S, P, and Q

Given a tape program, a handout article with all headings omitted, and a notebook to provide a review of the S, P, and Q steps of the SPQ3R reading system and to provide practice in the use of these steps, the student will (1) listen to the program, (2) participate in the practice, and (3) submit at the end of the lesson the handout article with 100 percent of the headings correctly inserted. (The only grade possible is an A.)

405.

U-1-T-5B

3 R's--READ, RECITE, REVIEW

Given a tape program, a set of slides, a notebook, and a Study Guide to explain and illustrate the use of the 3 R's in the SPQ3R reading system, the student will (1) listen to the program, (2) examine the illustrations, and (3) submit at the end of the lesson the Study Guide with a minimum of 70 percent of the correct information inserted.

406.

U-1-T-6

REVIEW OF SPQ3R

Given a tape program, a set of slides, a handout article, and a Study Guide to provide a review of and practice in the use of the SPQ3R reading system, the student will (1) listen to the program, (2) participate in the practice, (3) examine the illustrations, and (4) submit at the end of the lesson the Study Guide with a minimum of 70 percent of the correct information inserted.

407.

U-1-T-7

PRACTICE OF SPQ3R

Given a tape program and a handout article to provide a review of and practice in the use of the SPQ3R reading system, the student will (1) listen to the program, (2) participate in the exercises covered in the lesson, and (3) submit at the end of the lesson a "Statement of Completion" which is explained on the tape. (The only grade possible is an A.)

GO TO NEXT PAGE

408.

U-1-T-8

FINAL QUIZ ON SPQ3R

Having had instruction and at least two demonstration sessions in the use of the SPQ3R system and having received a handout test including 16 questions and 2 articles, each containing no more than 1,500 words, the student will demonstrate his understanding of and his ability to apply all of the steps of the SPQ3R system by: (1) indicating in writing what each letter of the system stands for; (2) marking on one of the articles all of the portions of that article to which he would apply the S step; (3) answering 12 short-answer questions pertaining to the system and its use; (4) writing at least 3 acceptable Q's and placing them in the appropriate positions on one of the articles; and (5) labeling each indicated part of one of the articles (titles, subtitles, headings, types of print used, etc.) The student will have 50 minutes in the classroom to complete this work without the aid of any references or materials and will receive a minimum score of 75 percent.

409.

HOW TO PREVIEW A BOOK

U-8-T-1

Given a tape program, a set of slides, a notebook, and a Study Guide to explain and illustrate the techniques of surveying a whole book (particularly for study purposes), the student will (1) listen to the program, (2) examine the samples given, and (3) submit at the end of the lesson the Study Guide with a minimum of 70 percent of the correct information inserted.

410.

U-8-T-2

QUIZ ON BOOK PREVIEW

Having had instruction in the surveying of a book, the student will be given: (1) a typical textbook selected by the instructor, (2) a handout test including 40 to 45 questions pertaining to information and the location of information in the given text and texts in general, and (3) a series of pages taken from textbooks but without their headings. The student will demonstrate his understanding of the methods of surveying a textbook and his ability to locate and identify information and book parts by: (1) answering the questions given him (this requires knowledge of where to find specific information in a textbook), and (2) identifying the unlabeled pages as to which part of a book they represent. The questions will require the ability to identify, locate and use the following parts of a typical text: (1) cover, (2) flyleaves, (3) title page, (4) copyright page, (5) dedication page, (6) Table of Contents, (7) introduction and/or preface and/or foreward, (8) bibliography, (9) note pages, (10) index, (11) glossary, (12) appendix/appendices, (13) individual chapters, and (14) individual chapter parts. The student will have 50 minutes in the classroom to complete this work without the aid of any references or materials and will receive a minimum score of 75 percent.

OVER

412.

U-3-T-1

MINI-CUE (INTRODUCTION)

Given a tape program, a notebook, and a handout article to explain and illustrate the use of the mini-cue pattern and to provide practice in developing mini-cues, the student will (1) listen to the program, (2) participate in the practice, (3) examine the samples, and (4) at the end of the lesson submit: (a) the article with a minimum of 3 acceptable questions written in the appropriate space and (b) an acceptable mini-cue pattern indicating the organizational structure of the material, all major divisions, and at least 75 percent of the major supporting points.

413.

U-3-T-2

MINI-CUE (THEORY)

Given a tape program, a Study Guide, a notebook, and the corrected assignment from the previous lesson for the purpose of (1) explaining reasons for using mini-cues, (2) explaining benefits to be derived from their use, and (3) examining various types of patterns; the student will (1) listen to the program, (2) examine the examples, and (3) submit at the end of the lesson the Study Guide with a minimum of 70 percent of the correct information inserted.

414.

U-3-T-3

MINI-CUE (PRACTICE)

Given a tape program, a notebook, and a handout article to provide practice in the development of mini-cue patterns, the student will (1) listen to the program, (2) participate in the practice, (3) examine the samples, and (4) submit 2 items: (a) the article with a minimum of 2 acceptable questions written in the appropriate space and (b) an acceptable mini-cue pattern indicating the organizational structure of the material, all major divisions, and at least 75 percent of the major supporting points.

415.

U-3-T-4

MINI-CUE (PRACTICE)

Given a tape program and a handout article to provide practice in the development of mini-cue patterns, the student will (1) listen to the program, (2) participate in the practice, and (3) submit 2 items: (a) the article with a minimum of one acceptable question written in the margin next to the title, the introduction, and each heading and (b) an acceptable mini-cue pattern indicating the organizational structure of the material, all major divisions, and at least 75 percent of all major supporting points.

GO TO NEXT PAGE

416.

U-3-T-5

MINI-CUE FINAL TEST

Having received instruction and at least two demonstration/practice sessions in the use of mini-cue patterns, the student will present evidence that indicates his ability to utilize the mini-cue pattern. Acceptable evidence will consist of completing one of two options: OPTION 1 - The student will present 5 acceptable mini-cue patterns based on textbooks or lectures (except math or study skills) of his own choosing; in the case of a textbook, each mini-cue should cover 5 pages of the text (25 pages for the 5 patterns) and the exercise may be completed in an untimed situation out of class; the student should indicate the name of the text and the pages covered in each of the mini-cues; in the case of the lectures, the student should develop one mini-cue per lecture, for a total of 5; the student should indicate what class or lecture each mini-cue is based on and the date of each lecture. OPTION 2 - The instructor will supply a 1,500-word selection which the student has not seen in advance and on which he has 50 minutes in the classroom to develop an acceptable mini-cue pattern. In both of the above options, an "acceptable mini-cue pattern" is one which indicates the organizational structure of the material, all major divisions and at least 75 percent of all major supporting points.

417.

U-4-T-1

REVIEWING FOR EXAMS

Given a tape program, a set of slides, a notebook, and a Study Guide to explain and illustrate the theory and techniques of reviewing for exams, the student will (1) listen to the program, (2) examine the illustrations, and (3) submit at the end of the lesson the Study Guide with a minimum of 70% of the correct information inserted.

418.

U-4-T-2

HOW TO TAKE ESSAY EXAMS

Given a tape program, a set of slides, a notebook, and a Study Guide to explain and illustrate the theory and techniques of taking essay exams, the student will (1) listen to the program, (2) examine the illustrations, and (3) submit at the end of the lesson the Study Guide with a minimum of 70 percent of the correct information inserted.

419.

U-4-T-3

HOW TO TAKE OBJECTIVE EXAMS

Given a tape program, a set of slides, a notebook, and a Study Guide to explain and illustrate the theory and techniques of taking objective examinations and to provide practice in locating key words (qualifiers) in objective questions, the student will (1) listen to the program, (2) examine the illustrations, (3) participate in the practice, and (4) submit 2 items: (a) the sample exam from his practice with the key words in each question underlined and the questions answered, and (b) the Study Guide with a minimum of 70 percent of the correct information inserted.

OVER

420.

U-5-T-1

HOW TO UNDERLINE TEXTBOOKS

Given a tape program, a notebook, a Study Guide, and a set of handouts to explain and illustrate textbook underlining and noting techniques and to provide practice in these methods, the student will (1) listen to the program, (2) participate in the practice, (3) examine the samples, and (4) submit at the end of the lesson: (a) the Study Guide with a minimum of 70 percent of the correct information inserted, and (b) the set of 5 passages marked and noted with 80 percent accuracy according to directions given on the tape.

421.

U-5-T-2

HOW TO UNDERLINE TEXTBOOKS

Given a tape program, a notebook and a handout article to provide practice in underlining and noting a full-length textbook selection, the student will (1) listen to the program, (2) participate in the practice, (3) examine the samples, and (4) at the end of the lesson submit, according to directions given on the tape and in the previous lesson, the article with 80 percent of all necessary markings and notations inserted.

422.

U-5-T-3

HOW TO UNDERLINE TEXTBOOKS

Given a tape program, a notebook, and a handout article to provide practice in underlining and noting a full-length textbook selection, the student will (1) listen to the program, (2) participate in the practice, (3) examine the samples, and (4) at the end of the lesson submit, according to directions given on the tape and in previous lessons, the article with: (a) a minimum of 3 acceptable questions written in at the top of the first page and (b) 80 percent of all necessary markings and notations inserted.

423.

HOW TO UNDERLINE TEXTBOOKS (FINAL)

Having received instruction and at least two demonstration/application sessions in the techniques of locating and underlining major ideas and support and using marginal notations, the student will present evidence of acceptable underlining and marginal noting on at least 5 pages of a textbook of his choosing (excluding math); the student may do this exercise in an untimed situation out of class. "Acceptable underlining and marginal noting" means that which follows principles established in previous lessons over at least 80 percent of the material and which results in the location of at least 80 percent of the major ideas and major supporting points in the selection. If a student wishes, the instructor will supply a 1,500-word selection in lieu of the student's own textbook chapter; in this case, the student will have 50 minutes to do the underlining and marginal noting in the classroom; the same standards as above must be achieved.

GO TO NEXT PAGE

424.

U-5-T-4

OTHER WAYS TO MARK TEXTBOOKS

Given a tape program, a notebook, and a Study Guide to explain and illustrate techniques (other than underlining) for marking textbooks, the student will (1) listen to the program, (2) examine the examples, and (3) submit at the end of the lesson the Study Guide with a minimum of percent of the correct information inserted.

425.

U-5-T-5

OTHER WAYS TO MARK TEXTBOOKS

Given a tape program, a notebook, and a handout article to explain and illustrate one textbook marking technique, to review all marking techniques covered in this unit, and to provide practice in marking a full-length textbook selection; the student will (1) listen to the program, (2) examine the examples, (3) participate in the practice, and (4) at the end of the lesson submit, according to directions given on the tape (including little if any underlining) the article with (a) a minimum of 3 acceptable questions written in at the top of the first page and (b) 80 percent of all necessary markings and notations inserted.

426.

U-5-T-6

OTHER WAYS TO MARK TEXTBOOKS

Given a tape program and a handout article to provide practice in the marking of textbooks, the student will (1) listen to the program, (2) participate in the practice, and (3) at the end of the lesson submit, according to directions given on the tape (including little or no underlining), the article with (a) a minimum of 3 acceptable questions written in at the top of the first page and (b) 80 percent of all necessary markings and notations inserted.

427.

U-5-T-7

OTHER WAYS TO MARK TEXTBOOKS (FINAL)

Having received instruction and at least two demonstration/application sessions in techniques of marking and noting (other than underlining) texts, the student will present evidence of acceptable marking and noting (underlining may be included but underlining alone will not be acceptable and should be kept to a minimum) on at least 5 pages of a textbook of his own choosing (excluding math); the student may do this exercise in an untimed situation out of class. "Acceptable marking and noting" means that which follows principles established in previous lessons over at least 80 percent of the material and which results in the location of at least 80 percent of the major ideas and major supporting points in the selection. If a student wishes, the instructor will supply a 1,500-word selection in lieu of the student's own textbook chapter; in this case the student will have 50 minutes to do the work in the classroom; the same standards as above must be achieved.

428.

U-6-T-1

TIME MANAGEMENT--DIARY OF TIME

Given a tape program and a copy of "A Diary of Time," the student will (1) listen to the program and (2) before returning to the lab for the next lesson in this unit, complete, according to directions indicated on the tape and on the copy of "A Diary of Time," his own diary record covering 3 consecutive school days and either a Saturday or a Sunday.

429.

U-6-T-2

TIME MANAGEMENT--SUMMARY OF TIME DIARY AND SELF-EVALUATION

Having been given a tape program, a copy of the "Summary of Time Diary," and having brought with him his completed "A Diary of Time" covered in lesson #428, the student will (1) listen to the program; (2) according to the taped directions and using his own "A Diary of Time," fill in with 100 percent accuracy his own "Summary of Time Diary;" (3) before returning to the lab write, according to directions given, a self-analysis/reflection paper (not to exceed one page) in which he describes what he feels to be the implications, positive or negative (for study, for work, for general success, etc.), of the habits he exhibits as reflected in "A Diary of Time" and "Summary of Time Diary" (his reflections need not support the ideas previously presented by the instructor as negative or positive results of certain habits); and (4)submit, upon returning to the lab, the following 3 items: (a) "A Diary of Time," covering any 3 consecutive school days and either a Saturday or Sunday; (b) the "Summary of Time Diary;" and (c) the above-mentioned self-analysis/reflection paper. Grading will be based on doing the work, not on what is said in the paper. Honesty is important; there is no right or wrong reply.

430.

U-6-T-3

TIME MANAGEMENT--DEVELOP OWN IDEAL SCHEDULE

Given a tape program and a notebook to explain the reasons for scheduling one's activities, to illustrate a system for better scheduling and time management, and to provide directions for building one's own schedule, the student will (1) listen to the program, (2) examine the samples given, and (3) develop and submit his own schedule which conforms 100 percent to the principles established on the tape and in the illustrative materials. (The only grade possible is an A.)

431

U-6-T-4

TIME MANAGEMENT--IMPLEMENT OWN IDEAL SCHEDULE

Having submitted the schedule indicated in objective #430 and having had it approved as meeting that objective's minimum standards, the student will follow that schedule for a period of at least 2 weeks, at the end of which time he will present a self-analysis/reflection paper (not to exceed one page) in which he describes his reactions, positive and/or negative, to having followed the schedule. Grading will be based only on doing the work, not on what is said in the paper. Honesty is important: there is no right or wrong reply.

GO TO NEXT PAGE

432.

U-7-T-1

NOTE-TAKING PREPARATION

Given a tape program, a set of slides, and a Study Guide to explain and illustrate principles applicable to preparing for a lecture note-taking situation, the student will (1) listen to the program and (2) submit at the end of the lesson the Study Guide with a minimum of 70 percent of the correct information inserted.

433.

U-7-T-3

HOW TO TAKE LECTURE NOTES--5 R's and 3 FORMATS

Given a tape program, a set of slides, a notebook, and a Study Guide to explain and illustrate the 5 R's of note-taking and the 3 basic note-taking formats, the student will (1) listen to the program, (2) examine the samples given, and (3) submit at the end of the lesson the Study Guide with a minimum of 70 percent of the correct information inserted.

434.

U-7-T-4

SUBMIT OWN LECTURE NOTES

Given three formats (2-5-1, 2-6-2, and 2-3-3-2) for taking lecture notes, the student will present a series of notes based on at least 5 lectures (from classes other than math and this one) which indicate his ability to follow with 90 percent accuracy the established principles for at least one of these formats. Each set of notes should be appropriately labeled and dated. It is not necessary that all 5 sets of notes be from the same class or from a class the student is enrolled in.

435.

U-7-T-2

NOTEBOOK ORGANIZATION

Given a tape program, a set of slides, and a Study Guide to explain and illustrate the most efficient methods of building a notebook for study purposes, the student will (1) listen to the program and (2) submit at the end of the lesson the Study Guide with a minimum of 70 percent of the correct information inserted.

436.

U-7-T-5

SUBMIT OWN NOTEBOOK

Given the lectures, exercises, and other assignments from this and other courses, the student will, according to established principles for organizing a notebook for maximum study effectiveness, present a notebook, prior to the last week he will be attending this course, which exemplifies these principles. The notebook should adhere to the established principles with at least 90 percent accuracy.

OVER

437. U-9-T-1

LISTENING--PRE-TEST

Given a page of directions, the pre-test tape, an answer sheet, and the Effective Listening book which accompany the Xerox Effective Listening Program, the student will (1) follow the directions on the Direction Page, (2) listen to each section of the tape only once, (3) take no notes while listening, (4) respond to each section of the pre-test afterwards as directed, and (5) submit the pre-test at the end of the tape. The test consists of 2 approximately seven-minute oral selections at the end of which the student, without having taken notes, must in writing indicate the major idea(s) and the major supporting points.

438. U-9-T-2

LISTENING--LESSON #1

Having completed the pre-test and having been given a page of directions, the Effective Listening book, and the first tape in the Xerox Effective Listening Program, the student will (1) follow the directions on the Direction Page, (2) listen to each section of the tape only once, (3) take no notes while listening, (4) record, according to directions given, his responses on his own separate sheet of paper, (5) check, where required, his responses as directed, and (6) submit his page of answers at the end of the lesson.

439. U-9-T-3

LISTENING--LESSON #2

Having completed the pre-test and the first tape, and having been given a page of directions, the Effective Listening book, and the second tape in the Xerox Effective Listening Program, the student will (1) follow the directions on the Direction Page, (2) listen to each section of the tape only once, (3) take no notes while listening, (4) record, according to directions given, his responses on his own separate sheet of paper, (5) check, where required, his responses as directed, and (6) submit his page of answers at the end of the lesson.

440. U-9-T-4

LISTENING--LESSON #3

Having completed the pre-test, and the first and second tapes and having been given a page of directions, the Effective Listening book, and the third tape in the Xerox Effective Listening Program, the student will (1) follow the directions on the Direction Page, (2) listen to each section of the tape only once, (3) take no notes while listening, (4) record, according to directions given, his responses on his own separate sheet of paper, (5) check, where required, his responses as directed, and (6) submit his page of answers at the end of the lesson. The student must complete objective #441 immediately following (during the same hour) completion of this objective.

GO TO NEXT PAGE

441.

LISTENING--POST-TEST

Having completed the pre-test, scoring in one of the categories listed in the left column below; having completed all three tapes in the developmental part of the Xerox Effective Listening Program; and having been given a page of directions, the post-test tape, and an answer sheet for that program; the student will (1) follow the directions on the Direction Page, (2) listen to each section of the tape only once, (3) take no notes while listening, (4) respond to each section of the post-test afterwards as directed, and (5) score on the post-test according to the minimum percentage of increase listed in the right column opposite his pre-test scoring category. The test consists of two approximately seven-minute oral selections at the end of which the student, without having taken notes, must in writing indicate the major idea(s) and the major supporting points. He must be able to distinguish these points while being distracted by background noises, foreign accents, lack of organization, irrelevant material, and/or illustrative material. The student must complete this objective immediately following (during the same hour) completion of objective #440.

Pre-test score (points)	Minimum post-test % of increase		
	for grade of....C	B	A
0 - 25	200%	250%	300%
26 - 50	100%	125%	150%
51 - 75	50%	65%	75%
76 - 100	30%	35%	40%
101 - 150	20%	22%	26%
over 150	see instructor		

GRADE RECEIVED ON THIS OBJECTIVE WILL ALSO BE ASSIGNED TO OBJECTIVE #'s 437 THRU 440.

Courtesy of Golden West College, Hearing Impaired Program

COURSE OUTLINE

Golden West College

Date________________

Division Special Services

Instructor Dan Cleve

I. COURSE: Special Education (Name) 071 (Number) Vocational Planning for HIP Students (Descriptive Title)

1 Units

II. CATALOG DESCRIPTION:

Prerequisite: None Recommended for hearing impaired students who have yet to arrive at a vocational goal. This course examines the vocational world as it relates to the deaf. Occupational information, testing and projects assisting students to initiate a vocational plan.

Course Hours (per week): Two Credit/No Credit
Repeatable for No Credit

PLEASE CHECK:
X Fall
X Spring
X 9 Weeks
____ 18 Weeks
____ Weeks

III. TIME ALLOCATION: Hours/Week

Lecture 2
Lab ______
Demonstration ______
Other ______ (Explain)________________________

IV. COURSE GOALS AND OBJECTIVES: (Skills, attitudes and knowledge a student may develop from the course)

1. The student will have a cognitive knowledge of the world of work.

2. The student will have a more realistic appraisal and outlook regarding his vocational/academic future.

3. The student will explore his relationship with the world of work.

V. PURPOSES OF THE COURSE:

General Education		Remedial	X
Adult Education		Occupational	
Transfer		Community Service	

VI. COURSE CONTENT: (Outline of course content leading toward goals and objectives)

1. Testing

   a. Why we test
   b. Meaning of testing for students
   c. Test administration: interest, aptitude, personality, intellectual, achievement
   d. Synthesis

2. Job Exploration

   a. Factors influencing job selection
      1. Handicaps/disability
      2. Intelligence
      3. Schooling
      4. Race
      5. Geographic area
   b. Outside interviews
   c. Supplemental readings
   d. Widening occupational roles (VIEW)

3. Work
   a. History
   b. Role of the occupation in the life of the individual
      1. Needs as motivators
      2. Self-concept
      3. Interests
   c. Why we work
   d. Job characteristics
   e. Study of occupations
      1. Aptitudes
      2. Work environments
      3. Abilities

VII. LEARNING STRATEGIES or TEACHING METHODS:

___X___ lecture
_______ audio tutorial laboratory
_______ audio and/or visual tutorial segments available in Media Center or classroom
_______ computer
___X___ small-group instruction
_______ laboratory or studio
_______ team teaching
_______ off-campus speakers or consultants
_______ off-campus field trips
_______ work experience
_______ other (specify)_______________________________________

VIII. EVALUATION METHODS:

The student will have a more realistic appraisal of himself as judged by his instructors and counselor.

The student will be able to write a resume or fill out a job application.

The student will conduct and exhibit appropriate behaviors in a simulated job interview to be judged by his peers and teachers.

The student will be able to list his major interests, aptitudes, and capabilities.

IX. REQUIRED COURSE MATERIALS:

Textbook(s):

You, Your Job and Change, Oxford Book Company

OTHER MATERIALS (be specific):

Handouts

LEARNING ENVIRONMENT INCLUDING FACILITY REQUIREMENTS:

Room for 20 students; chairs-moveable desk tops; overhead projector, blackboard.

Courtesy of Golden West College

COURSE OUTLINE

Golden West College

Date: January 16, 1973

Division: Special Services

Instructor: Dan Clere

I. COURSE:	Special Education	070	Personal Development for HIP Students
	Name	Number	Descriptive Title
		1	
		Units	

II. CATALOG DESCRIPTION:

Prerequisite: None This course is designed to assist the student in becoming an emotionally healthy, responsible, and self-reliant adult.

Course Hours (per week): Two Credit/No Credit
Repeatable for no credit.

PLEASE CHECK:
X Fall
X Spring
X 9 Weeks
____ 18 Weeks
____ Weeks

III. TIME ALLOCATION: Hours/Week

Lecture 2
Lab ____
Demonstration ____
Other ____ (Explain) ____

IV. COURSE GOALS AND OBJECTIVES: (Skills, attitudes and knowledge a student may develop from the course)

1. The student will have a cognitive knowledge of a healthy personality.
2. The student will have knowledge of his personal strengths and interests and achievement level.

V. PURPOSES OF THE COURSE:

General Education ______

Adult Education ______

Transfer ______

Remedial __X__

Occupational ______

Community Service ______

VI. COURSE CONTENT: (Outline of couse content leading toward goals and objectives)

1. Introduction- Risk-taking, honesty, responsibility, self-reliance
2. Characteristics of a healthy personality
3. Steps to solving problems
4. Defense mechanisms
5. Small Groups - Self "Who are you"
   a. Self disclosures
   b. Feedback
   c. Awareness of self
   d. Awareness of others
   e. Defenses
   f. Role playing
   g. Reality-testing

VII. LEARNING STRATEGIES or TEACHING METHODS:

__X__ Lecture

______ Audio tutorial laboratory

______ Audio and/or visual tutorial segments available in Media Center or classroom

______ Computer

__X__ Small-group instruction

______ Laboratory or studio

______ Team teaching

______ Off-campus speakers or consultants

______ Off-campus field trips

______ Work experience

______ Other (Specify)______________________________

VIII. EVALUATION METHODS:

The student will list the five steps to solving problems to be evaluated by the instructor.

The student will explain problem solving and write their method and submit one example.

The student will know five defense mechanisms discussed in class-list and define.

The student will know five characteristics of a healthy personality.

The student will have demonstrated self-reliant and responsible behaviors as judged by the instructor.

IX. REQUIRED COURSE MATERIALS:

Textbook(s):

Other Materials (be specific):

Handouts

LEARNING ENVIRONMENT INCLUDING FACILITY REQUIREMENTS:

Room for 20 students; chairs-moveable desk tops; overhead projector, blackboard.

Courtesy of Golden West College: Examples of Signs for Instructional Purposes
(Special signs are used for various technical courses)

PHYSICAL SCIENCE

POWER - Place "P" on shoulder and bring down in a curvature on forearm.

ENERGY - Sames as power except "E" is used.

RESULTS - Make "R" with elbow about at waist level, the "R" is placed palm up, then wrists are twisted so as to make "R" palms down.

LAW - "L" sign is placed on upper portion of palm and then pulled down to the lower portion after a slight separation of the "L" hand from the upheld palm.

LIGHT - One hand with fingers and thumb held together six inches from the face, fingers and thumb are separated with each finger spread apart from the other.

ATOM - An "A" is made with both hands, each "A" is made to revolve around the other.

ELECTRON - Same motion as atom except "E" is used.

PROTRON - One arm has elbow bent at waist level with palm turned upwards - the other hand forms a "P" over the upturned palm, makes a circular motion with the "P" remaining above the palm then dropping into it.

NEUTRON - Same as protron except "N" is used.

ELECTRICITY - With index fingers of both hands bent as much as possible the protruding joints are brought together and separated with a rapid open and closing of each index finger.

ASCENDING - One hand makes a fist with the back part of the hand turned upwards; the other hand makes an "A" that is placed on the fist and with circular motions is raised above the fist.

DESCENDING - Position one hand as though you were holding a drinking glass, with the other hand make the "D" sign and place the forearm in other hand; Draw the "D" hand downwards until the "D" emerges at the bottom of the other hand.

FORCE - Hold up the index finger of one hand, with palm of the other push it downwards.

SPEED - Position the forefinger of one hand as though pointing at something, with the other hand make an "L" - like sign and place the "L" on the wrist of the pointing hand. Push the "L" toward the end of the finger at the same time snapping the index finger and thumb of the "L" hand together.

PRESSURE - Position one hand as though grasping a glass, with the palm of the other press it downwards.

EXPERIMENT - With both hands make the "E" sign and make alternating circular motions with each.

LIQUID - Position one hand as though holding a glass, make an "L" with other with the index finger pointing away from the speaker, with a curving motion place the thumb portion of the "L" in the curvature of the other hand.

SOLID - One hand has the palm turned upwards, the other hand makes the "S" sign, the "S" hand makes a circle above the palm and drops into it.

Courtesy of Golden West College, Hearing Impaired Program

GUIDELINES FOR INTERPRETERS
GOLDEN WEST COLLEGE

The Interpreter's Role

The interpreter in a classroom is a professional whose expertise is twofold in translating from English to sign language everything that is said by the instructor or by a student during the class period; and in translating from sign language to English whatever the hearing impaired student wishes to convey. Translation in either should be aimed at maximum understanding on the part of the listeners/viewers, and, secondly, at conveying the exact meaning (sometimes the exact words, where appropriate) of the speaker/signer. The interpreter should strive to be as cooperative and helpful as the instructor or student desires, but without infringing upon the deaf person's right to be himself and succeed or fail on his own. Discipline in the classroom is the instructor's responsibility. And while the interpreter is not a tutor or an instructor, and should not ordinarily assume either role, he and the instructor can often form a very effective team. Goodman's The Deaf Student in the Hearing Class offers some excellent suggestions on how this may be brought about.

Ethics

Interpreters at Golden West College are encouraged to subscribe to the Code of Ethics of the Registry of Interpreters for the Deaf, copies of which are always available at the College. Special attention should be directed toward such essentials as confidentiality and allowing the deaf student to develop habits of independence and self-reliance in all matters, including communication. Punctuality and appropriate dress also project a professional image.

Self Improvement

While membership in a professional organization is not required of Golden West College interpreters, many have been able to enhance their interpreting knowledge and skill by attending workshops, reading literature on interpreting, and availing themselves of other opportunities for professional betterment. Literature on interpreting is available at the College, as well as textbook references, and other reading materials, for each interpreter's use. Interpreters are encouraged, if they wish, to further their own education while they are on the college campus, except that an interpreter ordinarily may not enroll in a class for which he is being paid to interpret.

Notification of Absence

Each interpreter's cooperation is requested whenever an absence is necessary. The interpreter is urged to notify the Lead Interpreter or the Chairman of the Hearing Impaired Program at the college or at home as early as possible. This makes it easier, especially in case of multiple absences, to find and assign a substitute(s) for that interpreter's classes.

bpy
4-73

Courtesy of Golden West College - Evaluation form for new interpreters

DATE: ____________________

NAME: ____________________

EVALUATIONS: ____

____

	EXCELLENT		AVERAGE	NEEDS	IMPROVEMENT
1. Clarity	____	____	____	____	____
2. Expression	____	____	____	____	____
3. Mouth Movements	____	____	____	____	____
4. Vocabulary	____	____	____	____	____
5. Fluency	____	____	____	____	____
6. Speed/Time Lag	____	____	____	____	____
7. Fingerspelling	____	____	____	____	____
8. Concept Transmission	____	____	____	____	____
9. Deletion of any key words, phrases	____	____	____	____	____
10. Ability to translate instead of interpret	____	____	____	____	____
11. Ability to interpret instead of translate	____	____	____	____	____
12. Your comprehension of material being interpreted	____	____	____	____	____
13. Mood and Feeling	____	____	____	____	____

Comments and Suggestions: ____

____

Comments On Reverse Interpreting: ____

____

Courtesy of Tarrant County Junior College District, Service Center for Opportunities to Overcome Problems

Campus (circle one):
N.E.
N.W.
S.

Major ________________

INTERVIEW SHEET

Semester __________, **19**___ **Date:** ________________

Name: ______________________________ **Birth Date:** __________ **Age:** ________
(last) (first) (middle)

Address: ____
(no.) (street) (city) (state) (zip code)

Telephone #: ____________________ **S.S.#:** ____________________

Married:_____ **Single:**_____ **Children?**_____ **How many?**_____ **Ages:** ____________

Employed?____ **Where?** ____________________ **Position:** ______________

Education: High School:_____ **Grade Completed:**______ **G.E.D.:**_____ **College:**______

Disability: ____

____

____

V.R.:_____ **C.B.:**_____ **Counselor:** ______________________ **V.A.:**_____

Services needed (check):

Notetaker:_____ **Mobility Assistance:**_____ **Tutor:**_____ **Reader:**_____ **Counseling:**_____

Motorized Wheelchair:_____ **Tape Recorder:**_____ **Placement:**_____ **Transportation:**_____

Media Assistance:______ **Explain:** ______________________________

Interpreter:______ **Braille Writer:**______ **Other:** ______________________

Additional Comments: ______________________________________

____

____

____

In case of emergency notify: **Name:** ____________________

Graduation (Degree) ____________________ **Address:** ____________________

Date ____________________ **Phone #:** ____________________

Placement ____________________

Date ____________________ **Interviewed by:** ____________________

Courtesy of Tarrant County Junior College District, Service Center for Opportunities to Overcome Problems

PRE-ADVISEMENT INFORMATION

Campus________ **Int'l**______

Student Name____ **Semester**_______________

Address____

Telephone_____________________ **S.S. #**____________________ **Reg. Asst.**____________

Handicap__________________________________ **Major**________________________________

Sponsoring Agency____________________ **Counselor**____________________ **Req. #**________

Assistance Needed:

Transportation____ **Reader**____ **Mobility**____ **Notetaker**____ **Interpreter**____ **Tutor**________

Tape Recorder____ **Motorized Wheel Chair**____ **Counseling**____ **books on Tape**______________

Course	No.	Title	Days	Time	Instructor

Number of Hours____

Comments____

APPENDIX D

Feasibility Study Project Advisory Committee

Mrs. Ruth Brown, Staff Specialist
Maryland State Department of Education
Division of Vocational Education

Mr. Frank Bryan, Principal
Maryland School for the Deaf
Columbia Campus

Ms. Norma Buemi, Vocational
Rehabilitation Counselor
Division of Vocational Rehabilitation

Mrs. James Clark, Jr.
Parent and Community Member

Mr. Edward E. Corbett, Jr.
Assistant Superintendent
Maryland School for the Deaf

Dr. David M. Denton, Superintendent
Maryland School for the Deaf

Mr. Joseph DeSantis
Staff Specialist in Vocational-
Technical Education
Maryland State Department of Education

Mr. Ron G. Frank
Director of Community Education
Gallaudet College

Ms. Gertrude Galloway, Vice Principal
Maryland School for the Deaf
Columbia Campus

Mrs. Bernice Hoeper, Director
Deaf Community Services
Lutheran Mission Society of Maryland

Mr. Edward T. Kilcullen, Consultant
in Services to the Deaf
Maryland State Department of Education
Division of Vocational Rehabilitation

Dr. Leonard Siger
Research Associate
Baltimore City Department of Education

Mr. James S. Smith
Associate Dean of Instruction
Howard Community College

Mrs. Jackie Stover, Liaison Worker
Baltimore City Public Schools

Dr. McCay Vernon, Professor
Western Maryland College

Ms. Judith R. Williamson
Extension Agent
University of Maryland

Ms. Anne Marie Zalewski
Faculty Member
Howard Community College

Appendix F
of
Final Report

Report 6: An Analysis of Postsecondary Education Resources in Maryland in Relationship to Needs of Deaf People

An Analysis of Postsecondary Education Resources in Maryland
In Relationship to Needs of Deaf People

Table of Contents

Introduction 1

Adult Education Programs. 2

Community Colleges 3

Maryland Rehabilitation Center 5

Relationship of Resources to Needs 8

Needs for Support Services 8

Needed Programs 9

Desirable Characteristics of a Postsecondary Institution Serving Deaf Students 10

Alternate Methods of Utilizing Maryland's Postsecondary Resources 12

Summary 14

References 15

APPENDICES

Map - Maryland Community Colleges . . . . Appendix A

Present Programs from Statewide Master Plan for Community
    Colleges in Maryland, Fiscal Years 1978 - 1987 . . . . Appendix B

Board of Education - Adult Programs . . . . Appendix C

Statement by Judy Harkins Before the U.S. House of Representatives
    Subcommittee on Select Education . . . . Appendix D

An Analysis of Postsecondary Education Resources in Maryland In Relationship to Needs of Deaf People

Judy (Athey) Harkins

Howard Community College

This report is an attempt to summarize public postsecondary educational resources in Maryland and to relate them to the needs of deaf adults. The term "postsecondary" is used in the broad sense, referring to all education occurring after secondary education. Thus, the target population is comprised of people 18 years of age and older. Because this project is designed to investigate occupational training, four year institutions are not included in the study. However, much of the information found in Report V: Existing Postsecondary Programs for Deaf Students is useful for all institutions serving deaf adults in an integrated setting as mandated by Section 504 of the Rehabilitation Act of 1973.

Adults in Maryland have several ways of obtaining postsecondary occupational education. The major sources of occupational training are community colleges and local adult programs, both of which are located throughout the state.

Community colleges are local institutions which serve the adult community through a variety of programs and through credit, non-credit, degree, and non-degree options. In addition to community colleges, adult programs are a major source of occupational training. Administered in most cases by the local education agency, these programs use local facilities such as vocational-technical centers. Local education agencies and community colleges also provide basic education and other courses of interest to the community. These courses carry no credit.

A third source of postsecondary training relevant to the needs of deaf people is the Maryland Rehabilitation Center in Baltimore, a comprehensive training facility for disabled people who are clients of the Division of Vocational Rehabilitation.

A number of private schools offer occupational training to adults. Vocational rehabilitation counselors have been forced to contract with these schools in the past because of a lack of services for deaf people in public education. Although the services of private schools should not be disregarded, the focus of this feasibility study is public education, and these schools will not be considered here as a major resource. Therefore, community colleges, adult education programs, and the Maryland Rehabilitation Center are the foci of this report.

Adult Education Programs

Most of Maryland's counties have an adult education program. Federal and some state funds help the local education agencies to provide basic education to citizens. Federal funds emanate from the Maryland State Department of Education's Division of Instruction (Adult Education) and Division of Vocational Technical Education. Vocational courses are available and provide an excellent source of hands-on education necessary to train people for specific jobs. Usually these courses are for those adults who want to upgrade skills, and they are not considered preparatory courses. For those who need help in basic education, courses are available which help adults work toward a high school equivalency.

Adult programs are administered by their respective departments of education, although, in a few cases, the local community college assumes this responsibility. Because they use existing facilities, classes may be offered throughout a county or Baltimore City. Usually classes are offered at night. The largest number of occupational training programs is offered by Baltimore County (56 programs), Montgomery County (25 programs), Prince George's County (22 programs), and Baltimore City (19 programs).

Adult programs as a group have a much smaller enrollment than community colleges. Usually a flat fee is charged to cover the cost of the instructor. No credit is awarded for adult education courses.

Community Colleges

Most of the information in this section comes from the Statewide Master Plan for Community Colleges in Maryland, Fiscal Years 1978-1987, a publication of the Maryland State Board for Community Colleges.

There are 17 community colleges in Maryland, some of which have multiple campuses. The map in Appendix A shows the locations of the campuses of these colleges. The seventeen colleges are: Allegany Community College, Anne Arundel Community College, Community College of Baltimore, Catonsville Community College, Cecil Community College, Charles County Community College, Chesapeake College, Dundalk Community College, Essex Community College, Frederick Community College, Garrett Community College, Hagerstown Junior College, Harford Community College, Howard Community College, Montgomery College, Prince George's Community College, and Wor-Wic Technical Community College.

All community colleges have an open admissions policy as institutions. Individuals are guaranteed admission to the college but not necessarily to every program. For example, most nursing programs in community colleges have selective admissions. To qualify for admission to the institution an applicant need only be a high school graduate, or hold a high school equivalency, or be over 18 years of age. Thus all adults may attend a community college. There is no exclusion clause for handicapped individuals in the Statewide Master Plan for Community Colleges.

Community college students have several options. They may work toward an associate degree or a certificate by taking credit courses. They may choose to take selected credit courses without following a degree or certificate program.

Or, they may choose to take non-credit courses offered through the colleges' continuing education/community services divisions.

Degree programs may be transfer programs for those desiring to attend a four-year college, or occupational programs for those who want occupational education. The Statewide Master Plan for Community Colleges describes the requirements for degree certificate programs in Maryland.

> "Degree programs must include not less than 60 semester hours of credit of which at least 24 must be in the area of occupational specialization. Degree programs also require a minimum of 15 credits of general education in such fields as the humanities, social sciences, natural sciences, and mathematics."
>
> "Certificate programs must include 12 or more credits primarily of specialized content stressing the technical and/or manipulative requirements of an occupation." (p. 33)

All of the community colleges provide some occupational training programs, the number of which depends on the size of the institution and the needs of its community. Some occupational training programs are regional, serving the entire state or a multi-county region of the state. For example, Catonsville Community College has a mortuary science program serving all of Maryland.

Two year colleges vary greatly in size with full-time equivalent enrollment ranging from 14 to 8,633 (1976 actual enrollments). The five largest community colleges in Maryland are:

1. Montgomery College
2. Prince George's Community College
3. Community College of Baltimore
4. Catonsville Community College
5. Essex Community College

The colleges with the largest adjacent populations are the Community College of Baltimore, Dundalk Community College, Essex Community College, Catonsville Community College, Prince George's Community College, and Montgomery College.

Community colleges are administered essentially under local control and programs are designed to meet the needs of the home community. Local boards of trustees govern the colleges. The State Board for Community Colleges regulates community college activities statewide.

State support for community colleges accounts for up to 50 percent of the operating budget. The local government must contribute a minimum of 28 percent of the funding, and students pay for the remaining 22 percent.

The Statewide Master Plan includes objectives for community colleges in the next ten years, and each goal has an implementation strategy. The implementation strategy most closely related to services for deaf students is found under objective #2.2: "Maryland community colleges will continue to expand services to meet the needs of part-time students, veterans, women, physically handicapped, and senior citizens" (Statewide Master Plan, p. 57). Of course, as recipients of federal funds, all public community colleges are required to comply with the Rehabilitation Act of 1973, Section 504, which prohibits discrimination based on handicap.

Maryland Rehabilitation Center

The Maryland Rehabilitation Center is a vocational training facility for clients of Vocational Rehabilitation. Located in Baltimore, MRC serves DVR clients of all disabilities and from all geographic areas of Maryland. Since the ultimate goal of vocational rehabilitation is employment, all services are directed toward readying the client for this goal.

Services used by deaf clients include the following:

1. Vocational training

2. Vocational evaluation
3. Remedial education
4. Counseling
5. Medical services
6. Occupational therapy
7. Psychological evaluation
8. Personal adjustment training (through a cooperative project with the Baltimore League for Crippled Children and Adults)
9. Speech and hearing services
10. Available residential facilities
11. Recreational opportunities
12. Some social services counseling

Obviously, the many and varied services of this facility have much to offer deaf people who need occupational training. Some staff members at MRC are versed in manual communication, and many are also trained to work with deaf people. There is at least one staff person or consultant fluent in sign language in each of the above service areas.

The environment at MRC is the type described by Schein as "comprehensive".

> "Students of comprehensive training require specialized training facilities--extended evaluation, personal and work adjustment, sheltered workshops--because of their very low educational potential." (Schein and Delk, 1974, p. 62)

Deaf people who could not benefit from the competitive and independent atmosphere of community college education could receive the multiple services they need to enter the world of work. Therefore, the MRC would be ideally suited to serve deaf adults with low achievement levels, below average independent living skills, and those with certain multiple handicaps. As a matter of fact, the deaf caseload at MRC is shifting more toward these types of clients, according to staff there.

There is one important disadvantage of MRC's programs for deaf clients. More then half of the occupational training programs offered require an eighth grade or above reading level. Less than one-fifth of the programs require a fourth to fifth grade reading level, which is average for deaf people of normal intelligence. Much of the reason for these high reading levels in such occupations as duplicating machine operator is that much of the instruction at MRC is programmed and individualized. The student must be able to read to learn the hands-on tasks of the occupation.

Recently, an effort has been made to lower the reading level requirements somewhat for deaf clients. However, clients with very low reading levels are offered only two options: food service and custodial. No official figures were available on placements of deaf clients who completed these training areas.

There are other occupations besides custodial and food service worker which require little reading. Occupations in laundry and drycleaning, groundskeeping, and housepainting are some possibilities. To truly meet the needs of deaf clients, MRC needs to add some new training areas, and to make necessary revisions in instructional methods.

Another (and according to the staff, secondary) need at MRC is the need for classroom interpreters. Most instructors cannot sign. The degree of demonstration possible during instruction varies from occupation to occupation; some require more theory and explanation than others. Also, even in demonstration situations, the instructor is likely to talk and describe his/her actions. The deaf student misses this explanation and is at a serious disadvantage.

There has been much improvement at MRC in recent years in services to deaf clients. With a few changes, the facility could have a model program for deaf clients who need comprehensive services.

Relationship of Resources to Needs

The needs of deaf adults for postsecondary occupational training can be viewed in two ways:

1. What support services are needed? What is required of programs to enable them to serve deaf adults?

2. What programs are needed? That is, which community colleges, adult programs, and rehabilitation services should begin or continue serving deaf adults?

Needs for Support Services

Ideally, all localities should provide full support services to all deaf people in all programs. Unfortunately, this ideal is not feasible in the near future, for the following reasons:

1. There is at present an insufficient supply of funds to provide a full range of support services for deaf students in every situation and program. Deaf students' communication and educational needs are unique, and it bears repeating that the provision of an interpreter alone is inadequate for meeting the needs of most deaf students in an integrated setting.

2. Deafness is a low incidence handicap. Only institutions in the population centers of Maryland are likely to draw a large enough number of deaf students to justify several staff members.

Regardless of these conditions, the rules and regulations of Section 504 state that all postsecondary institutions must serve all handicapped individuals. Institutions of higher education are worried about the impact of these regulations on their budgets. Professionals who are involved with serving deaf students at the postsecondary level are also concerned. The impact of the legislation could be that all institutions will attempt to serve deaf students at an unsatisfactory level, for example by using volunteer interpreters. The most successful programs for deaf students provide a core of support services that should not be overlooked. These basic services are interpreting, notetaking, tutoring, counseling, specialized instruction, and administration of these services.

Needed Programs

The Needs Assessment (Report 1) of this feasibility study documented the need for occupational training for deaf citizens in Maryland.

Because deaf adults as individuals vary greatly in their needs for training, all of the postsecondary resources of the state should be accessible to them. Section 504 of the Rehabilitation Act of 1973 legally guarantees this access, but in fact, access will be very limited without comprehensive support services which meet students' educational needs as well as communication needs.

Community colleges should play an important role in services for deaf students. Most postsecondary programs for deaf students[1] across the United States are located on community college campuses (Rawlings et al, 1975). Community colleges are usually interested in serving as much of the community as possible. They often have special remedial or developmental education departments to help students with reading, writing, and mathematics difficulties. Their programs of study have broad appeal because they are designed to meet the needs of people across the spectrum of educational achievement. Usually there is a division devoted to student services.

The centralization of support services is somewhat simplified in the community college because most coursework takes place on campus. Deaf people can take advantage of recreational pursuits by using college facilities. Many colleges have excellent media services, including videotape, which can assist deaf students by providing signed versions of the tape recorded materials.

---

[1] "postsecondary program for deaf students" refers to a set of support services that enable deaf students to be integrated in classes and school activities with hearing students. For the purposes of this report, the term does not imply a separate track for deaf students.

Adult education programs can also play an important role in postsecondary occupational training. They are especially useful for employed deaf adults in need of retraining or upgrading skills.

Because adult programs in general have less emphasis on reading and theory, they would be a good resource for deaf people who have mechanical aptitude but problems with English language. These programs parallel other states' vocational technical institutes, which do not exist in public education here.

The major drawback to adult programs for deaf people is one of logistics. In programs which schedule classes at scattered sites, there would be no staff person on duty who could communicate with the deaf person. In case of interpreter absence, it would be very difficult to schedule an emergency replacement. Since there are no full time faculty in these programs, inservice about the needs of deaf people would be difficult to conduct. A lack of orientation to the handicap often presents problems for both the student and instructor.

The best situation would be a cooperative plan for services to deaf people in which the community college and adult program work together to assure a wider range of occupational training options, with the educational support services of the community college. This type of articulated program is successful at Pasadena City College in Pasadena, California.

Desirable Characteristics of a Postsecondary Institution Serving Deaf Students

One of the objectives of the feasibility study was to study existing postsecondary programs of support services for deaf students. The information obtained from this phase of the study (Report V) is helpful in describing some of the desirable characteristics of an institution which will serve deaf students.

Attitude. The most important characteristic of the institution is interest in serving deaf students. This interest should be not merely an interest in complying with Section 504, but a real concern for the needs of hearing impaired people. In the planning stages, this commitment may be limited to the college administration. Later, the faculty and staff will become involved.

Programs. Because a program for deaf students would serve deaf students from a large area and because there may be only one comprehensive program of support services for these students, it is imperative that a wide variety of suitable occupational training programs be available in the institution. These programs should be as consistent as possible with the recommendations of Report II: Implications of Manpower Research in Postsecondary Education for Deaf People. If a program for deaf students is located in an institution with a limited number of suitable occupational training programs, the effect would be to limit deaf students' opportunities. Under Section 504, students would still be able to attend other community colleges. However, many deaf adults need more support services than can be provided in each institution in a decentralized mode.

Program diversity. Occupational training programs should range from hands-on occupations to higher level technical occupations. There should be a large number of certificate programs. In other words, the programs of the college should be suited to students with a wide variety of abilities.

Location. The institution should be geographically accessible to a large population. Because of its two population centers, Maryland should have at least two programs, but this is not necessarily feasible.

Administrative support. There should be support for the program from key administrative personnel so that the interests of deaf students are represented in decisions that would affect them.

Student-centered emphasis. The institution should be student-oriented as demonstrated by strong student services, developmental education and learning resources components.

Housing. Since students will be coming to the college from an unusually large geographic area, there should be apartments or other housing available in the surrounding area.

The largest community colleges have the most to offer deaf students in occupational training programs and accessibility to a large population. They also have the advantage of having apartments located nearby so that deaf students moving into the area would have a place to live. Because of their large enrollments, they have more comprehensive student services and support for students with educational problems.

The remaining variables are attitude and administrative support in appropriate areas of the organization. These cannot be assessed without an honest appraisal of what a program for deaf students would mean for each of these colleges. This analysis must be a joint effort of the project coordinator, the colleges' administrations, and the funding agencies.

Alternate Methods of Utilizing Maryland's Postsecondary Resources

The following represent possible options in service delivery. They are presented in ranked order of desirability for meeting the needs of deaf adults.

1. Full services throughout the state. The ideal situation would be for each community college and adult education program to have full support services for deaf people. This means that all institutions and programs would have qualified interpreters, notetakers, counselors, a program administrator, and instructors who could teach remedial and developmental classes for deaf people.

2. Two regional programs. The two major metropolitan areas (the Baltimore area and the metropolitan D.C. area) might offer full services for deaf people. This plan would reduce the commuting necessary for deaf people who want and/or need these support services. One community college and adult program in each area could cooperate to maximize the options for deaf adults in vocational-technical programs.

3. One regional program plus advisement for other institutions. If it is impossible to acquire sufficient funds to support two programs, there might be one program serving the entire state. The program would have sufficient staff to enable the program director to serve two functions. The director would administer the program for deaf students and also advise other community colleges and adult programs as to how they can serve deaf students on a small scale. The assistance provided to other institutions could include interpreter referrals, inservice instruction and materials for faculty, and production of videotapes as learning aids.

This regional program for deaf students would use the most successful methods of other programs of its kind in the country, based on the findings of the feasibility study. Interpreter training should be offered at the host institution.

4. One regional program. One program for deaf students might be established in Maryland with full support services but without an advisory capacity for other institutions who wish to serve deaf students. The existence of this program would not alter the other colleges' and adult education programs' responsibility to serve qualified deaf people who desire admission.

5. Consortium arrangement. One counselor-facilitator for the deaf might serve several institutions which have deaf students enrolled. The problem with this situation is that deaf students' needs do not crop up conveniently when the counselor-facilitator is on campus. What happens if an interpreter is not present or if the quality of interpreting services is not meeting the student's needs? Who would hire and schedule interpreters, act as an advocate for deaf students, give special remedial instruction? The effectiveness of the counselor's time would be drastically reduced by the need for travel time and the inefficiency of dealing with several systems.

6. One administrator statewide. One administrator might be assigned to assist community colleges in serving deaf students statewide. No direct services to students would be provided except the interpreting and notetaking services provided by the Division of Vocational Rehabilitation and the individual colleges.

Summary

It is feasible to offer postsecondary education to deaf adults in Maryland. The form these services will take will depend on funding, the interest of institutions and agencies in hosting a program for deaf students, and certain characteristics of the institutions.

The principal postsecondary resources for occupational training are adult education programs and community colleges. At least one adult education program and at least one community college in Maryland should offer full support services for deaf students, so that these students can be assured of quality postsecondary education within the state. The most efficient way for this to be accomplished would be a cooperative arrangement between one or more large community colleges and adult education programs in the same locality.

In addition, the Maryland Rehabilitation Center should offer comprehensive services for deaf individuals with low educational potential. To meet the needs of these clients, some new occupational training areas should be added at MRC.

References

Athey, J. Report I: Needs Assessment of Postsecondary Education for Deaf People in Maryland. Feasibility Study of Postsecondary Education for Deaf People. Columbia, Md.: Howard Community College, 1976-1977.

Athey, J. Report II: Implications of Manpower Research in Postsecondary Education for Deaf People in Maryland. Feasibility Study of Postsecondary Education for Deaf People. Columbia, Md.: Howard Community College, 1976-1977.

Federal Register. Vol. 42, No. 86, May, 1977.

Harkins, J. A. How They Do It: Existing Postsecondary Programs for Deaf Students and Implications for a Program in Maryland. Feasibility Study in Deafness. Columbia, Md.: Howard Community College, 1976-1977.

Maryland State Board for Community Colleges. Statewide Master Plan for Community Colleges in Maryland, Fiscal Years 1978-1987. Annapolis, Md., 1977.

Maryland State Department of Education. Division of Vocational-Technical Education. Directory of Vocational-Technical Programs 1975-1976. Baltimore, Md.

Maryland State Department of Education. Division of Vocational-Technical Education. Vocational Samples. Baltimore, Md. Vo-Tech Annual Report 1976.

Rawlings, B. W., Trybus, R. J., Delgado, G. L., and Stuckless, E. R. (Eds.). Guide to College/Career Programs for Deaf Students, Revised 1975 Edition. Gallaudet College, N.T.I.D., 1975.

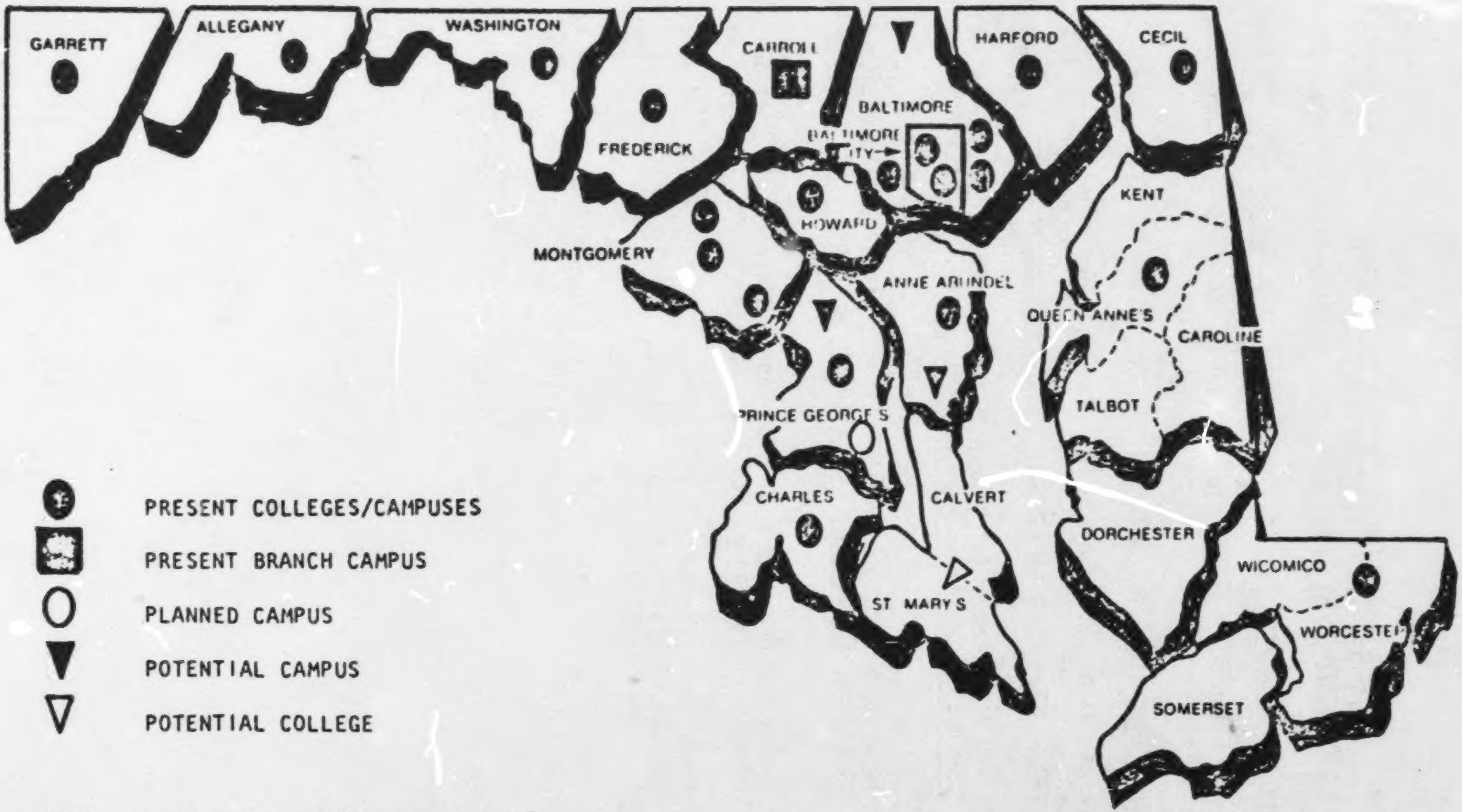
Schein, J. D., and Delk, M. T. The Deaf Population of the United States. Silver Spring, Md.: National Association of the Deaf, 1974.

Stuckless, E. R., Ph.D. (Ed.) Principles Basic to the Establishment and Operation of Postsecondary Programs for Deaf Students. CEASD, 1973.

Appendix A

Map

MARYLAND COMMUNITY COLLEGES


GARRETT
ALLEGANY
WASHINGTON
CARROLL
HARFORD
CECIL
BALTIMORE
BALTIMORE CITY
FREDERICK
KENT
HOWARD
MONTGOMERY
ANNE ARUNDEL
QUEEN ANNE'S
CAROLINE
TALBOT
PRINCE GEORGE'S
CHARLES
CALVERT
DORCHESTER
WICOMICO
ST MARY'S
WORCESTER
SOMERSET
● PRESENT COLLEGES/CAMPUSES
■ PRESENT BRANCH CAMPUS
○ PLANNED CAMPUS
▼ POTENTIAL CAMPUS
▽ POTENTIAL COLLEGE

NOTE: Dorchester and Somerset Counties are served by Wor-Wic Tech Community College.

Appendix B

Present Programs

from

Statewide Master Plan for Community Colleges in Maryland

Fiscal Years 1978 - 1987

ALLEGANY COMMUNITY COLLEGE

PROGRAMS

HEGIS Code	*Description*	*HEGIS Code*	*Description*
	Present Programs - Certificate		
5001-01	Business Training	5104-01	Electronic Data Processing Operator
5005-02	Secretarial Science	5202-01	Dental Assisting
5103-01	Electronic Data Processing Program	5306-01	Automotive Technology
		5505-01	Law Enforcement Training
	Present Programs - Associate Degree		
4910-01	Arts & Sciences Area	5203-01	Dental Hygiene
4920-01	Biological & Physical Science Area	5205-01	Medical Laboratory Technology
4940-01	Engineering Area	5207-01	Radiologic Technology
4950-01	General Studies Area	5208-01	Nursing
4960-01	Teacher Education	5216-01	Mental Health Technology
4970-01	Business Administration Area	5305-01	Chemical Technology
5001-01	Business Technology	5306-01	Automotive Technology
5005-01	Secretarial Science	5311-01	Electromechanical Technology
5008-01	Media Technology	5403-01	Forest Technology
5101-01	Electronic Data Processing Technology	5506-01	Recreation Leadership

* * * * * * * * * * * * * * * * * *

ANNE ARUNDEL COMMUNITY COLLEGE

PROGRAMS

HEGIS Code	*Description*
	Present Programs - Certificate
5005-02	Secretarial Science
5101-01	Electronic Data Processing
5303-01	Drafting
5310-01	Electronics
5315-01	Mechanical Engineering Technology
	Present Programs - Associate Degree
4910-01	Arts & Sciences Area
4920-01	Biological & Physical Science Area
4930-01	Humanities & Social Science Area
4940-01	Engineering Area
4950-01	General Studies Area
4960-01	Teacher Education Area
4970-01	Business Administration Area
5002-01	Financial Accounting
5004-08	Retail Management
5005-01	Executive Secretarial Science
5008-01	Multi-Media Technology
5101-01	Electronic Data Processing
5208-01	Nursing
5216-01	Human Services
5304-01	Architectural Technology
5309-01	Civil Engineering Technology
5310-01	Electrical Engineering Technology
5315-01	Mechanical Engineering Technology
5406-01	Ocean Engineering Technology
5505-01	Law Enforcement

COMMUNITY COLLEGE OF BALTIMORE

PROGRAMS

Present Programs - Certificate

HEGIS Code	*Description*
5003-01	Banking & Finance
5004-07	International Trade/ Harbor Management
5005-02	Office Skills
5012-02	Fashion Design
5012-03	Interior Design
5012-04	Piano Technology
5202-01	Dental Assisting
5210-01	Occupational Therapy Assistant
5211-01	Operating Room Technician
5299-01	Emergency Medical Service
5306-01	Automotive Technology
5309-01	Highway Design, Safety Engineer
5310-01	Electronics Technology
5317-02	Heating, Air Conditioning, & Refrigeration
5406-02	Oceanography
5408-01	Environmental Health Technology
5501-03	Government Service Aide
5503-02	Special Education in Speech & Hearing
5503-04	Communication Aide
5505-01	Public Safety
5599-01	Legal Assistant
5599-02	Gerontology

Present Programs - Associate Degree

HEGIS Code	*Description*
4910-01	Arts & Sciences Area
4920-01	Biological & Physical Science Area
4930-01	Humanities & Social Science Area
4940-01	Engineering Area
4950-01	General Studies Area
4960-01	Teacher Education Area
4970-01	Business Administration Area
5002-01	Accounting
5003-01	Banking & Finance
5004-01	Business
5004-07	International Trade/Harbor Management
5005-01	Secretarial & Office Sciences
5008-01	Radio & Television
5010-01	Hotel-Motel Administration
5010-02	Restaurant Administration
5012-02	Fashion Design
5012-03	Interior Design
5012-04	Piano Technology
5012-05	Commercial Art
5103-01	Data Processing & Computer Science
5203-01	Dental Hygiene
5204-01	Dental Laboratory Technology
5205-01	Medical Laboratory Technology
5208-01	Nursing
5210-01	Occupational Therapy Assistant
5213-01	Medical Records Technology
5215-01	Respiratory Therapy Technology
5216-01	Mental Health Technology
5219-01	Physical Therapist Assistant
5299-01	Emergency Medical Service
5303-01	Drafting Technology
5306-01	Automotive Technology
5309-01	Highway Design, Safety Engineer
5310-01	Electronics Technology
5315-01	Mechanical Technology
5317-01	Construction Technology
5317-02	Heating, Air Conditioning & Refrigeration
5399-01	Plant Engineering Technology
5404-01	Dietetic Technology
5406-02	Oceanography
5408-01	Environmental Health Technology
5501-01	Urban Development Assistant
5501-03	Government Service Assistant
5503-01	Early Childhood Education
5503-02	Special Education in Speech & Hearing

(Cont.)

BALTIMORE

Present Programs - Associate Degree *contd.*

5505-01	Public Safety
5506-01	Recreation Leadership
5506-03	Human Services Assistant
5507-01	Fire Protection Technology
5599-01	Legal Assistant
5599-02	Gerontology

New Programs, Fall 1977 - Certificate

5208-02	Occupational Health Nursing

CATONSVILLE COMMUNITY COLLEGE

20

PROGRAMS

Present Programs - Certificate

HEGIS Code	*Description*	*HEGIS Code*	*Description*
5002-01	Business Accounting ✓	5306-01	Automotive Technology ✓
5004-05	Materials Management ✓	5309-02	Surveying Technology ✓
5004-06	Real Estate	5310-01	Electronics Technology ✓
5005-02	Secretarial-Typist-Clerk Typist ✓	5312-01	Quality Control Technology ✓
5009-01	Printing Management Technology ✓	5312-02	Industrial Maintenance Technology ✓
5011-02	Traffic & Transportation Management	5315-01	Machine & Tooling Technology ✓
5012-05	Applied Art & Design ✓	5317-01	Construction Management Technology ✓
5101-01	Data Processing Technology ✓	5317-04	Building Standards Technology ✓
5299-03	Mortuary Science ✓	5505-01	Police Administration
5299-06	Occupational Safety & Health Technology ✓	5505-02	Correctional Services
5299-07	Dialysis Technology ✓	5506-01	Grounds & Park Management
5304-01	Architectural & Engineering Design Technology ✓		

Present Programs - Associate Degree

4910-01	Arts & Sciences Area	5299-03	Mortuary Science
4940-01	Engineering Area	5299-06	Occupational Safety & Health Technology
4950-01	General Studies Area	5304-01	Architectural & Engineering Design Technology
4960-01	Teacher Education Area	5305-01	Chemical Technology ✓
4970-01	Business Administration Area	5309-02	Surveying Technology
5002-01	Business Accounting	5310-01	Electronics Technology
5004-05	Materials Management	5312-02	Industrial Maintenance Technology
5004-06	Real Estate	5315-01	Machine & Tooling Technology
5004-08	Marketing Management	5317-01	Construction Management Technology
5005-01	Secretarial	5317-04	Building Standards Technology
5009-01	Printing Management Technology	5505-01	Police Administration
5011-01	Air Transportation Management	5505-02	Correctional Services
5011-02	Traffic & Transportation Management	5506-01	Recreation & Parks Leadership
5012-05	Applied Art & Design	5507-01	Fire Protection Technology
5101-01	Data Processing Technology		
5205-01	Medical Laboratory Technology ✓		
5208-01	Nursing		
5216-01	Mental Health Associate		

New Programs, Fall 1977 - Certificate & Associate Degree

5008-02	T.V. Station Operations & Maintenance Technology

CECIL COMMUNITY COLLEGE

PROGRAMS

Present Programs - Certificate

HEGIS Code	*Description*	*HEGIS Code*	*Description*
5005-02	Clerk Typist	5317-01	Construction Trades Technology
5007-01	Professional Photography	5505-01	Law Enforcement & Corrections Technology

Present Programs - Associate Degree

4910-01	Arts & Sciences Area	5007-01	Professional Photography
4950-01	General Studies Area	5205-01	Medical Laboratory Technology
4960-01	Teacher Education Area	5317-01	Construction Trades Technology
4970-01	Business Administration Area	5505-01	Law Enforcement & Corrections Technology
5001-01	Business Management		
5005-01	Secretarial Science		

CHARLES COUNTY COMMUNITY COLLEGE

PROGRAMS

Present Programs - Certificate

HEGIS Code	*Description*	*HEGIS Code*	*Description*
5004-06	Real Estate	5399-04	Solid Waste Technology
5005-02	Secretarial Science	5399-05	Pollution Abatement Technology
5104-01	Computer Operator	5402-01	Horticulture
5209-01	Practical Nursing	5504-01	Library Technology Assistant
5303-01	Drafting	5507-01	Fire Science Technology
5309-02	Surveying		

Present Programs - Associate Degree

4940-01	Engineering Area	5310-01	Electronics Technology
4950-01	General Studies Area	5399-05	Pollution Abatement Technology
5004-01	Management Development	5406-02	Estuarine Resource Technology
5004-06	Real Estate	5505-01	Law Enforcement
5005-01	Secretarial Science	5507-01	Fire Science Technology
5103-01	Computer Programming		
5301-01	Engineering Technology		

New Program, Fall 1977 - Certificate

5506-01	Recreation Leadership

New Program, Fall 1977 - Associate Degree

5208-01	Nursing

CHESAPEAKE COLLEGE

PROGRAMS

Present Programs - Certificate

HEGIS Code	*Description*	*HEGIS Code*	*Description*
5001-01	Business Management	5402-01	Agricultural Business
5005-02	Secretarial Science	5406-03	Bay Resources Marine Technology
5310-01	Electronics Technology		
5317-02	Air Conditioning/Heating, Refrigeration Technology	5503-01	Early Childhood Development
		5505-01	Law Enforcement

Present Programs - Associate Degree

HEGIS Code	*Description*	*HEGIS Code*	*Description*
4910-01	Arts & Sciences Area	5310-01	Electronics Technology
4960-01	Teacher Education Area	5317-01	Architectural-Building Construction Technology
4970-01	Business Administration Area		
5001-01	Business Management Technology	5406-02	Fisheries Science
5004-06	Real Estate	5406-04	Marine Management
5005-01	Secretarial Science	5505-01	Law Enforcement
5205-01	Medical Laboratory Technology	5506-01	Recreation Technician

DUNDALK COMMUNITY COLLEGE

10

PROGRAMS

HEGIS Code	*Description*	*HEGIS Code*	*Description*
	Present Programs - Certificate		
5004-06	Real Estate	5503-03	Child Development & Early Child Care ✓
5005-02	Secretarial Science		
5311-02	Power Engineering Technology ✓	5599-03	Paraprofessional Counseling
5213-03	Industrial Technology ✓	5599-04	Trade Union Administration
	Present Programs - Associate Degree		
4910-01	Arts & Sciences Area	5101-01	Data Processing ✓
4950-01	General Studies Area	5311-02	Power Engineering Technology ✓
4960-01	Teacher Education Area	5312-03	Industrial Technology ✓
4970-01	Business Administration Area	5503-02	Special Education Instructional Aide ✓
5001-01	Business & Industrial Management		
5002-01	Accounting ✓	5503-03	Child Development & Early Child Care
5004-06	Real Estate		
5005-01	Secretarial Science	5505-01	Criminal Justice
5007-01	Photography ✓	5599-01	Legal Assistant
5008-01	Media Technology ✓	5599-03	Paraprofessional Counseling
		5599-04	Trade Union Administration

ESSEX COMMUNITY COLLEGE

PROGRAMS

Present Programs - Certificate

HEGIS Code	*Description*	*HEGIS Code*	*Description*
5001-01	Small Business Management	5216-02	Drug Abuse Counselor
5003-01	Banking	5218-01	Health Services Management
5004-02	Statistical Clerk	5299-05	Podiatric Assistant
5005-02	Secretarial Science	5303-01	Drafting Technology
5010-02	Restaurant-Club Management	5503-01	Early Childhood Development Preschool
5103-01	Data Processing		
5202-01	Dental Assisting	5505-01	Criminal Justice

Present Programs - Associate Degree

HEGIS Code	*Description*	*HEGIS Code*	*Description*
4910-01	Arts & Sciences Area	5105-01	Computer Technology
4920-01	Biological & Physical Science Area	5202-01	Dental Assisting
		5205-01	Medical Laboratory Technology
4930-01	Humanities & Social Science Area	5206-01	Animal Science Veterinary Assistant
4940-01	Engineering Area	5207-01	Radiologic Technology
4950-01	General Studies Area	5208-01	Nursing
4960-01	Teacher Education Area	5216-01	Mental Health Associate
4970-01	Business Administration Area	5218-01	Health Services Management
5001-01	Business Management	5299-02	Nuclear Medicine Technology
5002-01	Accounting	5299-04	Health Planning Assistant
5003-01	Banking	5299-05	Podiatric Assistant
5004-01	Industrial Management	5299-08	Physician's Assistant
5004-02	Statistical Associate	5301-01	Engineering Technology
5004-08	Marketing Management	5399-06	Packaging Technology
5004-09	Personnel Management	5501-01	Urban Development Assistant
5005-01	Secretarial Science	5503-01	Early Childhood Development
5010-02	Restaurant-Club Management	5505-01	Criminal Justice
5099-01	Court & Conference Reporting	5508-01	Public Administration Assistant
5103-01	Data Processing		

FREDERICK COMMUNITY COLLEGE

PROGRAMS

Present Programs - Certificate

HEGIS Code	*Description*
5003-02	Property & Casualty Insurance
5003-03	Life Insurance
5005-02	Secretarial Science
5101-01	Data Processing
5202-01	Dental Assistant
5205-01	Biomedical Laboratory Technology
5302-01	Aviation Maintenance Technology
5310-01	Electronics Technology
5312-04	Industrial Technology, Power
5506-02	Park Operation & Management

Present Programs - Associate Degree

HEGIS Code	*Description*
4910-01	Arts & Sciences Area
4960-01	Teacher Education Area
4970-01	Business Administration Area
5001-01	Business Management
5002-01	Business Accounting
5005-01	Secretarial Science
5101-01	Data Processing
5205-01	Biomedical Laboratory Technology
5208-01	Nursing Education
5302-01	Aviation Maintenance Technology
5310-01	Electronics Technology
5312-04	Industrial Technology, Power
5505-01	Administration of Criminal Justice
5506-02	Park Operation & Management

GARRETT COMMUNITY COLLEGE

PROGRAMS

Present Programs - Certificate

HEGIS Code	*Description*	*HEGIS Code*	*Description*
5001-01	Business Technology	5403-02	Wildlife Management
5312-02	Maintenance Technology	5501-01	Human Services Technology
5401-01	Environmental & Renewable Resources		

Present Programs - Associate Degree

HEGIS Code	*Description*	*HEGIS Code*	*Description*
4910-01	Arts & Sciences Area	5005-01	Secretarial Science
4930-01	Humanities & Social Science Area	5312-02	Maintenance Technology
4950-01	General Studies Area	5401-01	Environmental & Renewable Resources
4960-01	Teacher Education Area		
4970-01	Business Administration Area	5403-02	Wildlife Management
5004-01	Business Occupational	5501-01	Human Services Technology
		5505-01	Law Enforcement

New Program, Fall 1977 - Certificate and Associate Degree

HEGIS Code	*Description*
5206-01	Veterinary Science Technology

HAGERSTOWN JUNIOR COLLEGE

PROGRAMS

HEGIS Code	*Description*	*HEGIS Code*	*Description*
	Present Programs - Certificate		
5005-02	Secretarial Administration & Clerk-Typist	5505-01	Police Services
5299-01	Emergency Medical Service	5505-02	Correctional Services
	Present Programs - Associate Degree		
4910-01	Arts & Sciences Area	5101-01	Data Processing
4920-01	Biological & Physical Science Area	5207-01	Radiologic Technology
4930-01	Humanities & Social Science Area	5208-01	Nursing
4940-01	Engineering Area	5311-01	Electrical Engineering Technology
4960-01	Teacher Education Area	5315-01	Mechanical Engineering Technology
4970-01	Business Administration Area	5404-01	Hospitality
5002-01	Accounting & Business	5503-01	Early Childhood Instructional Aide
5004-01	Management	5505-01	Police Services
5004-08	General Merchandising	5505-02	Correctional Services
5005-01	Executive Secretarial		

HARFORD COMMUNITY COLLEGE

PROGRAMS

HEGIS Code	*Description*	*HEGIS Code*	*Description*
	Present Programs - Certificate		
5002-01	Accounting	5103-01	Business Computer Program
5004-06	Real Estate	5303-01	Drafting-Surveying
5004-08	Retail Management	5306-01	Automotive Engineering Technology
5005-02	Office Education		
5007-01	Photography	5310-01	Electronic Technology
5008-01	Broadcasting	5505-01	Criminal Justice
5012-03	Interior Design	5505-03	Law Enforcement
	Present Programs - Associate Degree		
4910-01	Arts & Sciences Area	5008-01	Broadcasting
4940-01	Engineering Area	5012-03	Interior Design
4950-01	General Studies Area	5101-01	Business Data Processing
4960-01	Teacher Education Area	5208-01	Nursing
4970-01	Business Administration Area	5306-01	Auto Engineering Technology
5002-01	Accounting	5310-01	Electronics
5004-08	Retail Management	5407-01	Science Laboratory Technology
5005-01	Office Education	5505-01	Criminal Justice
	New Programs, Fall 1977 - Certificate & Associate Degree		
5003-03	Insurance	5301-01	Engineering Technician

HOWARD COMMUNITY COLLEGE

PROGRAMS

Present Programs - Certificate

HEGIS Code	*Description*	*HEGIS Code*	*Description*
5004-03	Housing Management	5317-03	Carpentry ✓
5004-08	Retailing	5399-02	Biomedical Engineering ✓
5005-02	Stenographic Clerical	5402-01	Plant Science
5101-01	Data Processing ✓		

Present Programs - Associate Degree

HEGIS Code	*Description*	*HEGIS Code*	*Description*
4910-01	Arts & Sciences Area	5005-01	Secretarial Science
4950-01	General Studies Area	5101-01	Data Processing [redacted] (above)
4960-01	Teacher Education Area	5208-01	Nursing
4970-01	Business Administration Area	5212-01	Vision Care Technology ✓
5002-01	Accounting ✓	5310-01	Electronics Technology not current
5004-01	Business Management ✓	5399-01	Biomedical Engineering [redacted] (above) Technology

MONTGOMERY COMMUNITY COLLEGE

PROGRAMS

Rockville Campus

Present Programs - Certificate

HEGIS Code	*Description*
5005-02	Secretarial
5010-02	Food Management
5104-01	Computer Operator
5503-01	Instructional Aide
5503-03	Child Care Aide
5505-02	Corrections
5507-01	Fire Science

Present Programs - Associate Degree

HEGIS Code	*Description*
4910-01	Arts & Sciences Area
4920-01	Biological & Physical Science Area
4930-01	Humanities & Social Science Area
4940-01	Engineering Area
4950-01	General Studies Area
4960-01	Teacher Education Area
4970-01	Business Administration Area
5002-01	Accounting
5004-01	Management
5005-01	Secretarial
5008-01	Radio & T.V. Broadcasting
5009-01	Printing Technology
5010-01	Hotel-Motel Management
5010-02	Food & Beverage Management
5012-05	Advertising Art
5103-01	Computer Science & Technology
5105-01	Computer Technician
5301-01	General Engineering
5304-01	Architecture & Construction
5309-01	Civil Engineering
5310-01	Electronics
5315-01	Mechanical Engineering
5505-01	Criminal Justice
5506-01	Recreation Leadership
5507-01	Fire Science
5508-02	Geography, Cartography, & Community Planning

Takoma Park Campus

Present Programs - Certificate

HEGIS Code	*Description*
5005-02	Secretarial
5202-01	Dental Assisting
5214-01	Medical Assistant

Present Programs - Associate Degree

HEGIS Code	*Description*
4910-01	Arts & Sciences Area
4920-01	Biological & Physical Science Area
4930-01	Humanities & Social Science Area
4940-01	Engineering Area
4950-01	General Studies Area
4960-01	Teacher Education Area
4970-01	Business Administration Area
5005-01	Secretarial
5103-01	Computer Science & Technology
5202-01	Dental Assisting
5204-01	Dental Laboratory Technology
5205-01	Medical Laboratory Technician
5207-01	Radiologic Technology
5208-01	Nursing
5214-01	Medical Assistant
5216-01	Mental Health Associate

PRINCE GEORGE'S COMMUNITY COLLEGE

PROGRAMS

HEGIS Code	*Description*	*HEGIS Code*	*Description*

Present Programs - Certificate

5004-06	Real Estate	5104-01	Computer Operations
5005-02	Secretarial & Clerk-Typist	5317-01	Residential Construction
5103-01	Computer Programming	5503-03	Day Care

Present Programs - Associate Degree

4910-01	Arts & Sciences Area	5213-01	Medical Records Technology
4930-01	Humanities & Social Science Area	5215-01	Respiratory Therapist
		5216-01	Human Services-Mental Health
4940-01	Engineering Area	5299-02	Nuclear Medicine Technology
4950-01	General Studies Area	5301-01	Mechanical Engineering Technology
4960-01	Teacher Education Area		
4970-01	Business Administration Area	5303-01	Drafting Technology
5001-01	Business Management-Administrative Assistant	5309-01	Civil Engineering Technology
		5310-01	Electronic Engineering Technology
5002-01	Accounting		
5004-06	Real Estate	5311-01	Electrical Engineering Technology
5004-08	Marketing Management		
5005-01	Secretarial Science	5312-01	Industrial Engineering Technology
5101-01	Computer/Data Processing		
5202-01	Dental Assistant	5503-03	Child Care Assistant
5205-01	Medical Laboratory Technology	5505-01	Law Enforcement
5207-01	Radiologic (X-Ray) Technology	5506-01	Recreation Leadership & Parks
5208-01	Nursing	5507-01	Fire Science Technology

New Programs, Fall 1977 - Associate Degree

5306-01	Automotive Technology

WOR WIC TECH COMMUNITY COLLEGE

PROGRAMS

Present Programs - Certificate

HEGIS Code	*Description*	*HEGIS Code*	*Description*
5005-02	Secretarial Science	5010-01	Hotel-Motel Management

Present Programs - Associate Degree

HEGIS Code	*Description*	*HEGIS Code*	*Description*
4910-01	Arts & Sciences Area	5005-01	Secretarial Science
5001-01	Business Management	5010-01	Hotel-Motel Management
5002-01	Accounting	5505-01	Law Enforcement
5004-08	Retail Management		

New Programs, Fall 1977 - Certificate

HEGIS Code	*Description*	*HEGIS Code*	*Description*
5209-01	Practical Nursing	5317-03	Carpentry
5306-01	Automotive Services Technology		

New Programs, Fall 1977 - Associate Degree

HEGIS Code	*Description*	*HEGIS Code*	*Description*
5004-08	Wholesale Distribution		

Appendix C

Board of Education - Adult Programs

Adult Programs

Industrial Drafting
Electrical Occupations
Industrial Electrician
Cable Splicing Journeymen Elec.
Basic Electric Design
Electronics Occupations
Radio & TV
Foremanship Super Manage. Devel.
Metal Technology
Machine Shop
Sheet Metal
Welding Electric
Small Engine Repair
Woodworking
The Metric System
Efficient Reading Learning Course
Consumer Ed. for Homemakers

Caroline County Board of Education
Law Building
Market St.
Denton 21629
Farm Mechanics
General Office Clerks

Carroll County Board of Education
County Office Bldg.
Court St.
Westminster 21157
Clothing & Textiles
Housing & Home Furnishings
Bookkeepers
Key Punch Cod. Equip. Operator
Data Processing Programmers
General Office Clerks
Stenographers
Typists
Workstudy for Dropouts & Disad.
Mechanics
Drafting
Electronics Occupations
Machine Shop
Combination Welding

Cecil County Board of Education
Booth St. Center
Elkton 21921
Clothing & Textiles
Housing & Home Furnishing
Bookkeepers
Stenographers
Typists

Frederick County Board of Education
Agricultural Production
Agricultural Power & Machinery
Pharmacology Review
Clothing & Textiles
Bookkeepers
Key Punch & Coding Equip. Operator
Stenographers
Typists
Mechanics
Masonry
Plumbing & Pipefitting
Drafting
Graphic Arts Occupations
Metal Trades Combined
Quantity Food Occupations
Woodworking
Remedial English
General Business High School
Consumer & Vocational Math. Remed.

Montgomery County Board of Education
850 Hungerford Dr.
Rockville 20850
Business Agricultural
Apparel & Accessories
Real Estate
Registered Representative
Pharmacology
Clothing & Textiles
Consumer Education
Foods & Nutrition
Housing & Home Furnishings
Bookkeepers
Bus. Data Proc. System Occup.
General Office Clerks
Secretaries
Stenography & Shorthand

Boards of Education

Allegany County Board of Education
108 Washington St.
Cumberland 21502
- Proto. Oper. of Family Aide Appl.
- Regional Ed. Ser. Agency Demo.

Anne Arundel County Board of Education
2644 Riva Rd.
Annapolis 21401
- Clothing & Textiles
- Clothing & Construction
- Business Machines
- General Office Clerks
- Shorthand
- Typing
- Trades & Industrial Occupations
- Mechanics
- Auto Mechanics Disad.
- Foremanship Super. & Man. Develop.

Baltimore City Board of Education
3 E. 25th St.
Baltimore 21218

- Food Distribution
- Comprehensive Homemaking
- Clothing & Textiles
- Family Health
- Air Cond. & Oil Burning
- Mechanics
- Masonry
- Drafting
- Electronics Occupations
- Radio Television
- Lithograph. Photo. & Platemaking
- Welding Combination
- Barbering
- Cosmetology
- Quantity Food Occupations
- Stationary Energy Source Occup.
- Tailoring
- Industrial Sewing
- Basic Education

Baltimore County Board of Education
6901 N. Charles St.
Greenwood
Towson 21204
- Farm Business Management
- Landscaping
- Claims Represen. Social Sec. Admn.
- Real Estate
- Public Speaking
- Sales Personnel
- Reading for Management
- Practical Nurse
- Pharmacology
- Clothing & Textiles
- Consumer Education
- Wills Trusts & Estates
- Family Relationships
- Foods & Nutrition
- Home Management
- Housing & Home Furnishing
- Landscape Design
- Bookkeeping
- Office Machines Operators
- Data Processing
- Key Punch Operators
- Programmers
- General Office Clerks
- Stenographers
- Supervisory & Admn. Management
- Clerk Typists
- Typists
- Electronic Technology
- Computer Programmer
- Teachers Asst. at Preprimary Level
- Air Conditioning & Refrig.
- Body & Fender
- Mechanics
- Blueprint Reading
- Plumbing & Pipefitting
- Basic Hydraulics
- Carpentry
- Maintenance Mechanics
- Custodial Services

- Typing & Touch Typing
- Business English Usage for Sec.
- Training for Per. in Dead End Jobs
- Architectural Drafting
- Electronics Occ.
- Fore. Super. & Management Develop.
- Combination Welding
- Trade & Ind. Supp. Information
- Applied Civil Engineering
- Lip Reading & Manual Commun.
- Personal Counseling

Prince George's County Board of Education
P.O. Drawer 120
Upper Marlboro 20870

- Coor. of Consumer Homemaking
- Business Data Proc. Sys. Occupa.
- Computer & Console Operators
- Programmers
- Math for Data Processing
- Introduction to Punch Card
- Stenographers
- Typists
- Air Conditioning
- Blueprint Reading
- Carpentry
- Masonry
- Plumbing & Pipefitting
- Electrical Code
- Steel Layout
- Safety & Rigging
- Drafting
- Electrical Occupations
- Electronics Occupations
- Sheet Metal
- Welding & Cutting
- Surveying

Wicomico County Board of Education
Long Ave. & Mt. Hermon Rd.
Salisbury 21801

- Bookkeepers
- Machine Oper. Bill. Bk. Computing
- Key Punch Coding Equip. Oper.
- Stenographers
- Typists
- Masonry
- Electrical Occupations
- Electronic Technican
- Dressmaking

Appendix D

STATEMENT BY

JUDY HARKINS

PROJECT COORDINATOR
STATEWIDE FEASIBILITY STUDY
POSTSECONDARY EDUCATION FOR DEAF PEOPLE
(PART B FUNDS, P.L. 90-576)
HOWARD COMMUNITY COLLEGE
COLUMBIA, MARYLAND

BEFORE THE
U.S. HOUSE OF REPRESENTATIVES
SUBCOMMITTEE ON SELECT EDUCATION
FRIDAY, SEPTEMBER 16, 1977

WASHINGTON, D.C.

THE REHABILITATION ACT OF 1973 (Section 504)
IMPLICATIONS FOR POSTSECONDARY EDUCATION FOR DEAF ADULTS

As project coordinator of a statewide feasibility study of postsecondary education for deaf people in Maryland, I have had an opportunity to view the regulations of Section 504 from the perspective of an advocate of the rights of deaf taxpayers, and as a consultant to community colleges and adult education programs.

Among other things, the feasibility study found that there is a great need among deaf adults for occupational education such as a community college or adult education program would offer.

Since community colleges and adult education programs have open admissions policies, they must serve all adults in the community who desire services. Under such qualifications, virtually all disabled students fit the term "qualified". These institutions and agencies are dedicated in varying degrees to serving educationally disadvantaged students. All of these factors are advantageous to deaf adults who need occupational education.

However, there are intervening factors which change this very promising picture. The average deaf adult of normal intelligence has a reading level of fourth to fifth grade. This large educational gap is caused by the impact of hearing loss in acquiring English language. Deaf people, in effect, must learn English as a foreign language, without the benefit of hearing the words of that language. Again, it is important to remember that the intelligence of deaf people is distributed in the same way that it is distributed among the general population.

Because of this educational gap, which is a very real part of the handicap, the average deaf person in a community college needs more support than just an interpreter. A notetaker must provide copies of class notes so that the deaf student can attend visually to the interpreter and instructor. Tutors and counselors who are fluent in sign language are needed. Limited special class instruction in reading and writing skills will require an instructor experienced in teaching English language to deaf people. These support services and others are characteristic of approximately 40 of the nation's community colleges which are dedicated to meeting the needs of deaf students in an integrated setting.

Deafness is a low incidence handicap with a prevalence rate of about two deaf persons per 1,000 persons in the general population. Most community colleges and adult education programs will not be able to provide in-depth services for the few deaf adults in their respective communities. At least in the early stages of the implementation of the 504 regulations, the test of reasonableness might not extend to all of the services mentioned above.

Some college officials have expressed the concern that if they invest funds in more comprehensive services for one group of handicapped citizens, they will serve other groups less well, and therefore jeopardize their compliance with Section 504. The initial implementation of Section 504 will probably see post-secondary institutions providing a minimal level of services in an effort to comply. For many handicapped people, this result is sufficient. For deaf people with high reading levels, coping under these circumstances (for example, with only an interpreter) will not be so great a problem. For the average deaf citizen, however, this level of service is likely to result in failure and an unnecessary low self-image.

The focus of the Rehabilitation Act of 1973 was the severely disabled person. It would be at best unfortunate if the result of the 504 regulations would be only to serve the cream of the crop.

For these reasons, I support the provision of federal appropriations to assist institutions of higher education in serving severely disabled students. However, I would like to reinforce the caveat mentioned in Tuesday's testimony by various advocacy groups for disabled individuals. Postsecondary institutions should first be able to show that they have shifted priorities and, to the best of their ability, allocated resources for the elimination of discriminatory practices in their institutions.

Appendix G
of
Final Report

Report 7: Funding Sources and a Suggested Proposal for a Program for Deaf Students

Funding Sources and a Suggested Proposal

For a Program for Deaf Students

Table of Contents

Funding Sources 1

A Proposed Program for Deaf Students 4

Statement of the Problem 4

Proposed Solution 6

Proposed Programming 6

Objectives of the Program 7

Evaluation 9

Proposed Budget 10

Prospective Funding Sources for a Postsecondary Program for Deaf Students

The following information is provided in outline form for the sake of clarity. Please keep in mind that the date of this report is March, 1978. Because funding sources change, guidelines change, and appropriations change, it will be important to check on the most up-to-date information possible.

I. United States Office of Education, Washington, D.C.

A. Education of the Handicapped Act (93-380) Section 625, regional postsecondary programs for handicapped. This funding is administered by Melvin Ladson of the Bureau of Education for the Handicapped (Telephone 202-245-9722). The language, both of the law and its funding guidelines, is perfect for the kind of program needed in Maryland. No matching money is required. Also, this authorization funds no regional program for deaf people in the eastern United States. The closest programs funded by BEH are in New Orleans and St. Paul. However, no new awards will be granted in the next fiscal year since the appropriation is too low.

B. TRIO Funds - Special Services for Disadvantaged Students. The applicant must be an institution of higher education, and the services must benefit physically handicapped students. The contact person is Mary Kay Smith at the Office of Education (Telephone 202-245-2511). Although the appropriation has been greatly increased, competition is stiff. The average grant is $81,000, which is an adequate level for a new program. No match is required.

However, there is a problem with this funding source. Under the HEW requirements for funding, students to be served must already be enrolled in the college as a basis for justifying the support services needed. Unfortunately for us, deaf people have enough sense not to enroll in large numbers in institutions that have no support services. This is also true of other disability groups. The reason for this stipulation in HEW is probably that the legislation was written principally for disadvantaged minority students. Thus it does not take into account the dilemma of low incidence of handicapped individuals.

II. Maryland State Department of Education (Telephone 301-796-8300)

A. Division of Vocational-Technical Education

1. Set-aside funds for handicapped and disadvantaged students are available. In Maryland, a 50% match by program is required. Ruth Brown, Staff Specialist for Special Programs, administers this funding.

2. Mini-grants could supplement the project budget for research and/or demonstration functions.

3. CETA (Comprehensive Employment Training Act) funds. CETA programs have been charged with providing assistance to disabled as well as disadvantaged persons.

B. Division of Vocational Rehabilitation

1. Client Services funds are available for deaf students who are clients of the agency. These funds may pay for tuition, books, interpreters, and other services. This once very reliable funding source is less reliable now due to the 504 regulations placing the responsibility for service on the institution of higher education.

2. Innovation and expansion grants are available as seed money for new sources which benefit clients.

III. Foundations

IV. State Funding

Because it would serve students from throughout the state, there may be a possibility of obtaining state funds for a program for deaf students.

This has been accomplished in Connecticut and California through the efforts of the community of handicapped citizens and others. In Maryland, a show of support for this idea would require the cooperation of colleges and disabled citizen advocacy groups.

V. Service Clubs

The Lions' and Quota Clubs could purchase equipment or services in small quantities for a program of this kind.

A PROPOSED PROGRAM FOR DEAF STUDENTS

Throughout the United States, deaf citizens are being successfully integrated into the existing programs of community colleges. In approximately 40 to 50 colleges, special support services for these students are usually identified as a "program for deaf students" or a "hearing impaired program". In Maryland, Washington, D.C., West Virginia, Delaware (and until recently, Virginia) no such programs exist.

To find out more about the methods used by these programs and to obtain recommendations for Maryland's postsecondary institutions, Howard Community College, Columbia, Maryland, has sponsored a statewide feasibility study with federal support funding from the Maryland State Department of Education's Division of Vocational Technical Education. Some of the study's findings will be included in this narrative, and the reports of the study are available upon request.

Statement of the Problem

There are approximately 35,000 deaf people in Maryland. Of these, about 8,300 are people who became deaf before age 19, i.e., before they acquired postsecondary education. The deaf population is distributed in proportion to the general population, with somewhat larger than average concentrations in the metropolitan areas.

Deaf people need postsecondary education, particularly occupational education. The median income of deaf adults is more than $2,000 below that of the general population. One of the reasons for this discrepancy is very limited access to higher education. Only about 12% of deaf people attend any college at all, in contrast to more than one-third of the general population.

Underemployment is another economic factor which illustrates the need for postsecondary education for deaf people. Deaf people are grossly over-represented in laborer and operative occupations when compared with the general population. These occupations have a projected growth of slower than average for the next decade. In professional, technical, and service occupations, which have better than average projected growth, they are under-represented. Thus, the employment situation among deaf adults is very nearly the reverse of a healthy growth pattern. Although other factors, such as employer attitude, also significantly affect this pattern, postsecondary educational opportunities will help alleviate the problem.

A common misconception in Maryland is that most deaf adults can receive the education they need at nearby Gallaudet College. However, Gallaudet is a four year liberal arts college with entrance requirements that leave out 90% of deaf high school graduates. Even among those who are able to attend Gallaudet, not all want a liberal arts curriculum.

At present, deaf people must leave the Maryland-Washington D.C. area to receive quality support services in postsecondary education, despite the existence of excellent community colleges within the state. For example, many deaf people go to St. Paul Technical Vocational Institute in St. Paul, Minnesota, a federally funded regional program for deaf students.

Many other deaf adults in Maryland choose to forego postsecondary education rather than leave their home state. Of course, this decision compounds their problems in finding employment. Vocational rehabilitation counselors serving deaf clients have maintained a strong interest in this feasibility study because of the crying need for a program for deaf students in Maryland.

Most deaf students in community colleges across the nation are enrolled in occupational education curricula. In Maryland, this trend would probably be more marked because of the proximity to Gallaudet College. Residents of Maryland who can benefit from Gallaudet's programs would have less need for transfer programs than would deaf students who live far from Gallaudet.

Proposed Solution

The experience of other institutions shows that the optimum way to serve deaf students is to offer a system of support services at one college in a population center, on a regional basis. The community college serving deaf students should be one that has characteristics suited to serving deaf people. Occupational programs must be a prime consideration, as must geographic location, previous experience with serving special populations, and strong developmental education and student service components. Above all, the college must be interested in providing services for disabled people.

Proposed Programming

Qualified deaf students will be integrated into the regular programs of the college. Support services will assist deaf students and the faculty and staff working with them bridge the communication gap, which is the major barrier to program accessibility.

Support services will include:

Interpreters. Interpreters relay the spoken lecture and class discussion to deaf students and interpret the deaf student's communication to the rest of the class when necessary.

Notetakers. Notetaking is often done by a hearing classmate of the deaf student. Because deaf students must constantly watch the interpreter and instructor, they cannot look down to take notes.

Notetakers must be recruited; then they receive brief training and finally their notes are evaluated.

Counselor. Counseling is a high priority support service because of the number of adjustments required of deaf students. Attendance in a mainstream situation forces a great deal of independence. In addition, the stress of attending a hearing college is often complicated by the student's need to relocate and find housing in the area.

Special Classes. Special class instruction in basic English, math, and other subjects will be needed by most students, since the average deaf person reads at a fifth grade reading level, despite normal intelligence.

Sign Language Classes. These classes should be available on campus for hearing students and staff. Usually these classes are very popular among hearing students.

Faculty Inservice and Ongoing Individual Assistance. Faculty and staff must feel confident in their dealings with disabled students. Their needs are a priority concern in the support service system.

Objectives of the Program

The program for deaf students has these objectives:

1. To provide the necessary support services that will enable deaf students to function in regular classes. Support services will include but not be limited to interpreting, notetaking, counseling, tutoring, and limited special classes in developmental education.

2. To provide in-service training for the faculty and staff of the college in working with deaf students.

3. To work with parents, schools, Gallaudet College's Center for Continuing

Education, and the Division of Vocational Rehabilitation to recruit deaf students.

4. To provide sign language instruction on campus for those students and staff who are interested in learning.

5. To give technical assistance as requested by the community colleges of the Baltimore metropolitan area in serving deaf students under Section 504.

6. To develop remedial courses and orientation to college activities for deaf students who need such assistance.

7. To develop evaluation techniques and in-service training for interpreters.

8. To develop a wage scale for interpreters based on experience, certification, and proficiency.

The feasibility study's report on existing postsecondary programs for deaf students contains detailed information on the operation of programs of this kind. Tasks required to fulfill these objectives will be performed by the following staff members, with the division of labor approximately as follows:

Position	Duties
Project Director	Hires, supervises, and evaluates interpreters; recruits and trains notetakers; coordinates tutorial services; supervises counselor and instructor; recruits students; assists other departments (e.g. admissions, registrar, business office, developmental education) in matters relating to deaf students; arranges in-service training for staff; represents the interest of deaf students in institutional policy-procedural matters that affect them; advises other colleges and adult programs regarding serving deaf students; develops a preparatory and orientation program for incoming deaf students; evaluates support services; develops a wage scale for interpreters, develops adapted instructional media as necessary (e.g. from audio tape to videotape in audio-tutorial instruction modules); provides liaison with vocational rehabilitation counselors; teaches one sign language course.
1/2 time Counselor	Provides personal, social, academic, and career counseling for deaf students; assists students in solving housing problems.

Part-time Instructor	Teaches 6 hours of special classes for deaf students per semester. The subject matter will depend on students' needs, but will be focused on reading and math; works in cooperation with developmental learning program.
Secretary-Interpreter	Provides secretarial support to program; does emergency interpreting; handles daily contact with interpreters and substitutions in case of interpreter absence; schedules interpreter services.

This size staff could serve a deaf student enrollment of up to 35 - 40 students, which could possibly be realized in the second year of the project. For enrollments above 40 students, the counselor and instructor positions should be increased to full-time. At this staff level, the program would probably level off. Interpreter costs will not increase in proportion to enrollment, since deaf students will take many of the same courses.

Evaluation

Objective	Subject	
1	Support Services	A written survey of deaf students will evaluate all aspects of support services. A written survey of faculty and staff members who had substantial contact with deaf students will evaluate support services.
2	In Service	A written evaluation of inservice sessions will be asked of faculty at the end of the inservice session and at the end of the semester.
3	Recruitment	Enrollment should increase by at least 20% in the second year of the project.
4	Sign Language	Written evaluation of sign language courses will be given by participating students and staff.
5	Technical Assistance for other institutions	A written evaluation of assistance will be obtained via a survey of contact personnel in each community college in the area.
6	Remedial programs	An advisory group of five deaf educators and five staff members of the college will review and give feedback on proposed courses prior to implementation in the second year.

7	Interpreter Inservice	Interpreters will evaluate their inservice training via a questionnaire. Results will be judged by this instrument and by deaf students' evaluations of interpreting services.
8	Wage Scale for Interpreters	Proposed wage scale will be evaluated by a written questionnaire by an advisory group composed of 2 college administrators, 2 vocational rehabilitation administrators, 2 interpreters, and one deaf student.

Proposed Budget

(Note: Salaries will depend on college scale)

SALARIES	Amount
Project Director	18,000
Secretary-Interpreter	11,000
1/2 time Counselor	8,000
Part-time Instructor	8,000
Subtotal Salaries	45,000
Benefits @ 20%	9,000
Total Salaries	54,000
WAGES	
Interpreters and Notetakers (variable amount)	10,000
MATERIALS AND SUPPLIES	
General Office Supplies	500
Office Equipment	2,500
Media Materials	1,000
Library Accessions	100
OTHER EXPENSES	
Communications (including lease of portable teletype and purchase of telephone amplifiers)	1,000
Conference, Workshop, Travel (including in-service training, and use of college vehicle)	1,000
Printing and Advertising	400
Dues and Subscriptions	100
TOTAL	70,600

Appendix H
of
Final Report

List of Materials on Section 504 and Deafness, Distributed to Maryland's Community Colleges

APPENDIX H

Materials on Section 504 and Deafness

Prepared for Maryland's Community Colleges

1. Materials on Deafness:

   The barrier of deafness. *Report*. National Center for a Barrier Free Environment, 8401 Connecticut Avenue, Washington, D.C. 20015. November-December 1977, *3*, 4-5.

   Communication tips. *NTID Focus*. National Technical Institute for the Deaf, Rochester Institute of Technology, Public Information Office, One Lomb Memorial Drive, Rochester, N.Y. 14623, Winter 1977, 24.

   A Look at Fingerspelling. Public Service Programs, Gallaudet College, Kendall Green, Washington, D.C. 20002, 1973.

   Luke, R. A. and Donnels, L. *Welcome To The Quiet Life*. Center for Continuing Education, Gallaudet College, Washington, D.C. 20002, 1974.

   Stuckless, E. R., Ph.D. (Ed.) *Principles Basic to the Establishment and Operation of Postsecondary Programs for Deaf Students*. Conference of Executives Of American Schools For The Deaf, 5034 Wisconsin Avenue, N.W., Washington, D.C. 20016, 1973.

   You and Your Deafness. Public Service Programs, Gallaudet College, Kendall Green, Washington, D.C. 20002, 1973.

2. Directory of the Potomac Registry of Interpreters for the Deaf.
3. List of Classes in Sign Language offered in Maryland, courtesy of the Maryland School for the Deaf, Frederick, Maryland.
4. Publication List of the National Association of the Deaf.
5. List of Vocational Rehabilitation Counselors with primarily hearing impaired caseloads, courtesy of the Division of Vocational Rehabilitation.
6. Information on loop amplification and telephone compatibility with hearing aids, courtesy of Organization for Use of the Telephone.
7. Information on telecommunications devices.
8. Litigation related to Section 504, higher education, and deafness.
9. List of Funding Resources.
10. Suggestions on what to do if a deaf person comes to your college.

Appendix I
of
Final Report

Articles Published in Conjunction with the Feasibility Study

APPENDIX I

PUBLICATIONS IN CONJUNCTION WITH THE FEASIBILITY STUDY

Athey, J. Community colleges and education of the deaf. State Board for Community Colleges Bulletin, March 1976.

Athey, J. Needs assessment of postsecondary education for deaf people: interviews with deaf people and counselors. Maryland Rehabilitation Counselors Association Journal, 1977, 1:4, 24-28.

Harkins, J. Serving deaf students in postsecondary schools and implications for section 504. American Annals of the Deaf, in press.

Harkins, J. and Vernon, M. Community colleges and handicapped students. Community and Junior College Journal, 1977, 48:3, 35-37.

Vernon, M. and Harkins, J. Community colleges and deaf people. American Rehabilitation, 1978, 3:3, 16-17,26.

Appendix J
of
Final Report

Statement of the Project Advisory Committee
on the Location of a Program of
Support Services for Deaf Students

APPENDIX J

Statement of Feasibility Study Advisory Committee

The advisory committee of the statewide feasibility study of postsecondary education for deaf people supports these findings of the study:

1. Not all institutions are equally well suited to meed the needs of deaf people. The characteristics of some community colleges make them preferred locations for a regional program for deaf students. It is the feeling of the committee that the needs of deaf people must be a paramount concern in program planning.

2. The experience of other institutions serving deaf students clearly shows that a core of support services on campus is the key to the success of the average community college deaf student. Interpreters alone are inadequate.

3. Because a support service system of this kind is expensive, and because only one may be feasible in the near future, the location of this program for deaf students becomes a crucial issue.

4. Under these circumstances an institution adopting a program of support services for deaf students needs to have the following characteristics:

A. A large number and variety of occupational programs.

In the credit area, occupational education is the primary postsecondary need of Maryland's deaf adults. Liberal arts education is readily available at nearby Gallaudet College, but similar quality occupational education is not available. It is unfair to attract deaf students to a well planned support service system only to find their curricular choices grossly limited by a small number of occupational areas.

B. A large number of certificate options.

Many deaf students will need an alternative to the A.A. degree because of the reading difficulties associated with deafness.

C. A wide variety of student services.

College-wide student services supplement the special support service system for deaf students, and thus are extremely important.

D. An attitude toward disabled individuals, and deaf persons in particular, that respects their needs for the widest possible array of educational offerings, with emphasis in the occupational area.

E. An interest in serving deaf students despite the realization that the excess cost per student is very high and that colleges hosting such programs usually must bear some of the cost.

F. Previous experience in working with deaf people and agencies serving them.

G. A location in or near one of the population centers, on the I-95 corridor if possible.

H. The availibility of moderate cost housing within a several mile radius of the college for students who must relocate due to the program's serving on a regional basis.

Frank R. Bryan
Norma S. Buemi
Lillian Clark
Edward E. Corbett, Jr.
David M. Denton
Joseph P. DeSantis
Roland G. Frank
Gertrude S. Galloway
Bernice Hoeper
Edward T. Kilcullen
Jacalyn Stover
McCay Vernon
Judith R. Williamson
Ann Marie Zalewski